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ERNEST ALBEE, WILLIAM A. HAMMOND,
and FRANK THILLY
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THE PHILOSOPHICAL REVIEW.

EIGHTEENTH AND NINETEENTH CENTURY MODES OF THOUGHT.[1]

EVERYONE who has lived a number of years in the world, must at some time have been impressed by the changes that have taken place in his own ways of thinking and feeling. These changes as a rule take place slowly and imperceptibly, and are forced upon our attention only when we compare our present mental outlook with the thoughts and feelings of a more or less remote period in the past. The most striking example of this is found in the contrast between the simple and naïve attitude which the child takes toward life, and the more complex and sophisticated view of the adult. We soon learn to smile with a kind of wonder at the uncritical assumptions and credulity of our childhood, and it is not difficult to realize how wide is the gulf which separates us from that period of our lives. And even if we were to compare times less widely separated, we should find that our mental life has not remained unchanged. What a difference, for example, four years in college make. One's views regarding science, and literature, and art, regarding one's own nature and duties, and the meaning of life, become vastly transformed during that time. Change is the inevitable and necessary condition of progress. Absolute consistency is the virtue of little minds—of minds that do not grow.

Now what is true regarding the development of the individual

[1] This paper was prepared by the late Professor Creighton for presentation before a philosophical club. The Editors believe that its appearance here will be welcomed.

mind, is also true of the progress of thought in the mind of the race. Each age has its own attitude toward the world, its own intellectual problems, and its own ways of solving them. And, just as in the history of the individual life, new conceptions and beliefs displace the old ones, so in the thought of the race there has been a similar process of development. The race, like the individual, finds its mental life growing more complex through new experiences, and has to adjust itself in its thinking to those new conditions. The history of philosophy may be said to be a record of the changes that have taken place in man's thoughts in his attempt to understand the nature of the world, and to comprehend the meaning of life. Since in this process of development, the centuries may for purposes of comparison be taken as mile-stones—as the Christian Era a few years ago passed its nineteenth mile-stone—it will perhaps not be inappropriate to compare for a little the philosophical standpoint of the nineteenth century with that of the century which preceded it.

Before undertaking this, however, I wish to remind you that there is no exact and literal correspondence between the coming of the centuries and the types of thought that I am going to describe and contrast. You are not to suppose, that is, that the bells on New Year's morning, 1801, rang out once for all eighteenth century ways of thinking. As a matter of fact, the new leaven had been at work to a greater or less extent all through the last half of the eighteenth century. And, on the other hand, it is also true that eighteenth century conceptions and eighteenth century philosophy continued to live on as an accepted system in many quarters long after the new century had dawned. Perhaps it is not too much to say that in some quarters it is still the prevailing mode of thought. Moreover, if it is true that the intellectual development of the race is reproduced more or less exactly in the intellectual development of the individual—that here as elsewhere ontogeny corresponds to phylogeny—we shall have to say that the eighteenth century attitude is a stage that everyone who reflects must more or less explicitly pass through if he would be admitted to full membership in the intellectual polity of this later period.

It is of course true that thinking always goes on in individual

minds. The ideas which are to form the common stock of any century are the products of the mind of some great thinker. It is the great scientists and philosophers, and, in a somewhat different way, the great artists and poets, who first catch a glimpse of new truths that lie beyond the vision of the multitude. Now in treating of the philosophy of the eighteenth and nineteenth centuries, I shall take two men, John Locke and Immanuel Kant, as representatives. The influence of these two men upon their respective centuries was perhaps greater than that of any other thinkers, and in the contrast between the immediate consequences of their theories we shall find our contrast between eighteenth and nineteenth century ways of thinking.

The man who may be regarded as the forerunner of the eighteenth century is the Englishman, John Locke. His great work, *An Essay Concerning Human Understanding*, was published ten years before the beginning of the century. Locke was a plain, unassuming man, who was for the greater part of his life in delicate health, and whose seventy years were mainly passed in quiet and uneventful fashion. He died just four years after the opening of the century that was to be so greatly influenced by his thought. Even today Locke continues to exert a strong influence upon us. One of the best evidences of this is the fact that, when one reads the *Essay* at the present time, one's first feeling is that of disappointment because it seems so familiar, and appears to contain so little that is new or strange. The explanation of this is not that our insight is so greatly superior to that of Locke's time, but it is because this way of thinking has formed part of our intellectual heritage, and through its influence upon the terms and distinctions of ordinary speech it has been absorbed into the very fibre of our thought. The professed purpose of Locke's *Essay* is to raise questions regarding the nature of the human understanding, and the scope and validity of human knowledge. What is it to know? Under what conditions can we rightly claim to have valid knowledge, and how far does our knowledge extend? These are the problems which Locke attempts to answer. And the essential key-note of his answer is a protest against external authority and a

proclamation of the rights of individual reason. Knowledge, he declares, is something that the individual must realize and test in his own experience. Obvious as this may seem to us, it was by no means accepted as a matter of course in Locke's time. The intellectual attitude of the Middle Ages, the demand for some external authority as the test of truth, still continued. For the Middle Ages the teachings of the church formed the absolute standard of truth with regard to religious matters, and at the end of that period at least, Aristotle was the great authority, from whose teachings there was no appeal, on all scientific and philosophical questions. The Renaissance and the Religious Reformation were both assertions of the rights of the individual to use his own reason and to form his own conclusions. But both of these movements had stopped far short of the goal at which they aimed. Freedom of thought is not attained either by the individual or the race at a single stroke, but is something that is to be wrought out only by a long and toilsome process. Confidence in the deliverances of reason requires intellectual courage and intrepidity, and is first gained by the bolder spirits, who have then to teach the lesson to their contemporaries. Now Locke, though no extravagant iconoclast, was a bold and courageous champion of the rights of reason. For him error and superstition seemed to lurk behind the doctrine of innate ideas which had lately received the support of the great French thinker, Descartes. Although the thinkers of the seventeenth century supposed that they had entirely broken with authority, it yet seemed to them that certain ideas are so fundamental in knowledge, or so essential in our practical well-being, that they must stand on a different plane from the other contents of mind. Accordingly, they maintained that certain very important ideas are innate, born with us, engraved by God upon the mind at birth. Now Locke felt that in this way a door was opened by means of which all sorts of prejudices and superstitions might find entrance. For these innate ideas were not required to give any account of themselves. That they were not derived from experience, but were present in the mind at birth, was supposed to give them a kind of certificate of truth without any examination. The ideas that were usually declared to be innate

were those regarding the existence of God, the existence of the soul as a simple thinking substance, and those on which are based the fundamental principles of morality. It was hoped in this way to give these ideas a kind of special sanctity, to put them beyond the possibility of dispute or question. Locke did not by any means call in question the truth of these ideas. What he did object to was the wrong psychology upon which they were based, both because it was in itself without foundation, and because it seemed to him to limit the right of the individual to criticize and test all his knowledge for himself.

As a matter of fact, he says, we do not come into the world with any such ready-made stock of ideas. The mind at birth is entirely without ideas, like a blank sheet of paper on which nothing is written. All our ideas come from experience. Through the impressions which come to us by means of the senses, we gain our knowledge of the external world. And our ideas of the mind itself are gained by turning our gaze inward to observe what goes on in consciousness. In experience, inner and outer, the mind is furnished with ideas of everything that it can claim to know. A large part of Locke's *Essay* is devoted to tracing the origin of all kinds of ideas back to their source, in experiences of external sense, and of the internal sense or direct observation of consciousness. If one is not to deceive oneself with mere words, it is necessary to derive from one of these sources, to find concretely embodied in experience the actual ideas corresponding to the knowledge that we claim to possess.

There are two points to be noticed here which are characteristic of the standpoint of the eighteenth century. In the first place, there is the demand that all knowledge be capable of giving an account of itself in terms of clear and distinct consciousness. The validity of ideas is to be certified by a process of tracing them back to their origin. Clear and distinct ideas is the watchword of the whole century. Enlightenment is just the apotheosis of reason. Nothing is to be absolved from the task of rendering an account of itself before the bar of reason. Everything mysterious is to be abolished and all superstition destroyed.

It is important to notice that this was not merely a theory about the nature of knowledge, but a general attitude of mind

that had important practical results. As a protest against authority and a proclamation of the rights of the individual reason against what was merely traditional, this movement is of tremendous importance in the history of thought. But like all protests it was partial and one-sided. For it led to a sharp distinction and opposition between the existing body of historical ideas, customs, and institutions, and truths which are founded on the principles of reason. Locke's successors in England, and more especially in France, felt themselves called upon to make war, in the name of reason, upon what seemed to them false and irrational in the existing creeds and institutions of their time. No doubt there was much justice in the attacks they made upon the superstition and blind prejudice of those who unthinkingly adhered to what was merely historical. There is something heroic and inspiring in the high courage and optimism of these apostles of the Enlightenment, a courage born of faith in the right and the strength of reason. But in making so sharp the opposition between the historical and the rational, they failed to grasp the real nature and significance of reason itself. For they regarded reason as an abstract principle, shut up in individual minds, something that exists in independence of the process of experience. From its own nature reason was supposed to have the power of formulating certain eternal and necessary truths, certain fundamental propositions about the nature of knowledge and the necessary rights and duties that belong to man as a rational being. Now, they maintained, when the historical order of things does not agree with these deliverances of the individual reason, it stands condemned and must be abolished. The eighteenth century rationalists do not recognize that the nature of reason may be deeper than the deliverances of any individual human consciousness, and that perhaps this deeper rationality may be found embodied in the historical beliefs and institutions of society. These enlightened thinkers had never any doubt or difficulty as to the deliverances of reason. Reason was fully and adequately expressed in their own consciousness, and they were therefore ready at a moment's notice to sit in judgment on the past and its historical doctrines and beliefs. Moreover, they were convinced that what was

old was worthless: existing creeds and institutions were regarded as thoroughly irrational, as the deliberate creation of priests and rulers who wished to keep the people in subjection, and who had created the existing order of things to aid them in this purpose.

Without developing further the consequences of this abstract rational point of view, with its lack of historical interest and perspective, I wish to return to sum up Locke's account of the mind of man and its relation to the rest of the universe. As we have seen, the mind is at birth wholly devoid of ideas. It is simply an empty vessel to be filled up through sense-experience. In this process it is of course passive. The external forces by which it is affected contribute its whole content. The mind itself merely receives the ideas which are dropped into it as one might drop apples into a basket. Again, the mind is simply one finite particular thing, on a level, so to speak, with other things. Locke describes it as a soul substance. It is a spiritual, not a material substance, but it is on a plane with material substances in that it is just one particular thing with definite boundaries, a unit separated from the other units that make up the universe. Outside of it and quite distinct from it, is the world of material objects. Then, apart from both the finite mind and the world, God exists as a third separate and distinct entity. The external world is known, partially and very imperfectly, by means of the senses; and the existence of God, as we shall see more fully in a moment, can be demonstrated through reason.

The relation of the various parts of the universe is thus defined. God, man, and the world stand apart from one another and enter into merely external and accidental relations. There is no inner or organic bond uniting these separate beings, no underlying unity of nature binding them into real and essential connection. This position, clear and distinct as are the ideas upon which it is based, contained in it the germs of materialism and scepticism, and the century was not lacking in thinkers who pushed these consequences to their extreme conclusion. But, in general, the eighteenth century was not an age of doubt. It was rather an age in which reason rejoiced in fundamental certainties within the limits it had set for itself. Mathematics was still regarded as the perfect type of knowledge, and it was

supposed that mathematical certainty could be attained regarding the most important practical truths. The existence of God, the immortality of the soul, and the fundamental truths of morality, though not innate ideas, are propositions that are capable of being strictly demonstrated so as to compel the assent of every rational being. Just as we say that there is some intellectual defect in a person who is not convinced by a geometrical demonstration, so we must regard that man as a fool who doubts the existence of God in the face of certain proofs. We thus see the general intellectual standpoint of the century. As merely finite beings, the extent of our knowledge is very small. But we know as much as we have any right to know, and upon all points essential to our happiness we are not left to doubt or probability, but can enjoy the full assurance of complete demonstration. If we complain of the limits of our knowledge we should remember our finitude. "Shall the clay say to him that formed it, 'Why hast thou made me thus?'" In Pope's words:

> Presumptuous man! the reason wouldst thou find,
> Why formed so weak; so little, and so blind?
> First, if thou canst, the harder reason guess,
> Why formed no weaker, blinder and no less.
>
> Then say not man's imperfect, Heaven's at fault,
> Say rather man's as perfect as he ought,
> His knowledge measured to his state and place,
> His time a moment, and a point his space."

The great questions of human life are those which have reference to our relation to God and to our fellow-man. Religion and morality are the distinctively human interests of every age. Let us then look at the type of answers which the eighteenth century gave to these problems. First, what can we say about God and his relation to man and the world? For this century God was conceived as the first great cause. His existence can be proved from the existence of the world. The world must have been made by some one, it must have a first cause, who is himself uncaused and therefore infinite in nature. Moreover, the wisdom and goodness of God are clear from the evidences that nature shows of his designing skill and power. From a watch, we infer a watch-maker. And, in the same way, from

the evidences of plan and purpose in nature we must infer a divine architect and contriver. God then is related to the world as the watch-maker to the watch. At some point of past time, he made and fashioned everything. The world is the product of his infinite power and intelligent design. He has made it and contrived it, fashioned and put together all its parts. The world is a machine, composed of dead lifeless matter, but endowed by God with the property of motion. After the world-machine has once been started, so to speak, God interferes no more, or only at rare intervals, when He suspends the natural laws to work a miracle. As we have already pointed out, the relation between God and the world is external and takes place only at particular points of time. This is the point of view that Carlyle protests against so forcibly in the *Sartor Resartus*. "Is there then no God, or nothing more than an absentee God, who has been sitting outside of the world and seeing it go ever since the first Sabbath?"

Let us now turn to the eighteenth century idea of morality. In what relation was man supposed to stand to his fellow-man? We have already noted the tendency to make hard and fast divisions between the fundamental parts of the universe, God, man, and nature. Similarly, in the typical moral theories every individual was cut off from his fellow-men, and treated as an independent and exclusive unit. There was no attempt to discover any organic bond, any unity of nature or community of purpose that might unite man to his fellows—perhaps because such things could not be exhibited in the form of clear and distinct ideas. At any rate, the isolated individual is taken as the starting-point. Now the individual naturally desires his own happiness. As a self-centred individual, his sole interest will consist in the promotion of his own happiness. Now, of course, it cannot be maintained that morality is found simply in the direct gratification of this natural egoism. To be moral, implies that we have regard for the affairs of our neighbor; that we are willing, at least to some extent, to sacrifice our own interests to his. Now why is it *reasonable* to do this? This was the problem that troubled the writers of the eighteenth century. If each individual is himself a complete and independent whole,

why should his duty not consist simply in taking care of himself, and promoting his own best interest? There were, indeed, more than one writer of the eighteenth century who went beyond this narrow individualism and approached the conception of the organic unity of all individuals as members of one society, which forms the basis of our modern ethics. But the typical answer of the eighteenth century was a more or less elaborate demonstration that it *pays* to be moral. Since we live in the world with other individuals who have the power to affect our happiness, it is the part of wisdom to come to terms with them, to devote some attention to promoting their happiness in order that they may render us good services in return. And similarly, the wise man will learn to moderate his desires, and to repress those inclinations whose gratification leads to painful or unpleasant results. These are the duties that reason dictates. But the principle is simply that one gets more happiness for oneself by being moral. This is the superior insight of the moral man over the man who is governed by immediate impulses. The latter is a poor calculator, he does not know how to sum up the profits and losses. The moral man, on the other hand, learns to govern his actions by motives of prudence. He sees that honesty is the best policy, and that it is foolish to sacrifice a greater good in the future for the sake of gratifying some immediate desire. Thus morality became a kind of profit-and-loss book-keeping, a method of calculating how one could get the greatest amount of happiness at the least cost. Maxims of prudence were elevated to the rank of moral laws. The ethical writers were ready to demonstrate beyond the possibility of a doubt that the moral man's lot is preferable to that of the immoral man. The latter, like the atheist, is a fool who cannot follow a clear demonstration. Near the end of the century Paley added a new element. If you doubt on which side the balance of happiness falls between virtue and vice, if you think that perhaps after all there are circumstances when it does not pay to be moral, remember that you have not taken the next world into account. But since in the life beyond the grave, virtue is rewarded and evil punished, there can no longer be any doubt as to the wisdom of being moral. Every rational being

must at once see that virtue is true wisdom and wickedness the most extreme folly.

This, stated somewhat baldly, and therefore perhaps somewhat extremely, was the moral standpoint of the eighteenth century. Morality is always regarded as a means for securing happiness rather than as an end in itself. An enlightened egoism is the part of the wise man. Man as a poor finite being finds his wisdom in making the best of his lot, in securing peace and happiness for himself. To quote again from Pope's *Essay on Man*, which is in many respects an excellent expression of the thought of the time:

> Oh, sons of earth: attempt ye still to rise
> By mountains piled on mountains to the skies?
> Heaven still with laughter the vain toil surveys,
> And buries madmen in the heaps they raise.
> Know all the good which individuals find,
> Or God or nature meant to mere mankind,
> Reason's whole pleasure, all the joys of sense,
> Lie in three words, Health, peace, and competence.

From this point of view, it is not difficult to understand how the eighteenth century produced nothing that can properly be called poetry. Pope and Dryden have given us much clever satire and many brilliant epigrams in their mechanically polished verses, but real poetic imagination is entirely lacking. The simple fact is that in this age there was nothing left to make poetry about. God was the first great cause whose relation to the world was purely external and mechanical. Man was supposed to be simply a point, a particular fragment of the universe. His ruling principles are self-love and prudential reason, and his business in life is to secure the greatest possible amount of happiness for himself both here and hereafter. And as a rational being, with clear and distinct ideas, he is not troubled by any insoluble problems, or harassed by any persistent doubts. Within the narrow sphere to which the wise man learns to confine his inquiries, clear and certain knowledge is attainable. And finally the mechanical conception then prevalent, entirely excluded the possibility of any imaginative treatment of nature. Nature, that is, was regarded simply as a great and wonderfully-planned machine that had been contrived and set in motion by

Divine ingenuity. There was no motive to find in it any significance or meaning, any life that may have a kinship with the varying moods of man's mind.

Now under these circumstances, what is there left for the poet to do? Poetry is an attempt to pass, by means of the imagination, beyond the merely particular aspect of things, in order to discover in them a significance that cannot be stated in terms of the finite understanding with its clear and distinct ideas. It is the voice of our hopes and fears, of our instinctive sympathies and loves, of our longings and aspirations. But in the age of reason there was no room for any of these things. All that is idle sentimentalism. The only experiences of which any account can be taken must be in the form of clear and distinct ideas that come either from the senses or from reason. In short, where there is no doubt, no mystery, there can be no longer any function for poetry. When the soul resigns itself to finitude and raises no questions but those to which demonstrable and definite answers can be given, the office of the poet as the high-priest of humanity becomes vacant. The poetry of the nineteenth century, then, was not possible without new conceptions of God and nature and man.

In passing to an account of these new conceptions, I wish to remind you that there was no sudden or absolute reversal of the old point of view, but rather a gradual deepening and transformation of the former conceptions. Evolution and not revolution is the law of progress in the intellectual field as elsewhere. Moreover, it would be wrong to overlook the permanent element of value in the eighteenth century thought, or to forget that without it no more adequate conceptions would have been possible. But it had done its work, and the formulas and propositions in which it had summed up the world had proved too narrow for the facts of human experience. The new movement which was thus made necessary was not the work of any one man, but was the result of a number of historical influences and tendencies. On the side of philosophy, however, we may say that the greatest and most decisive event was the publication of Kant's *Critique of Pure Reason* in the year 1781. Kant was a simple, kindly old German professor who was born

and lived in a remote town of Eastern Prussia, and was scarcely more than fifty miles from home in his life. He devoted himself entirely to teaching and writing, and although he had a healthy human interest in social and political affairs, he lived the simple, reflective life of the scholar who stands apart from practical affairs and is absorbed in theoretical problems and ideas. And yet it is ideas that move the world. It is wonderful to think that this obscure little man, who as Heine says passed "an abstract mechanical old-bachelor existence" in a quiet remote street of the provincial town of Königsberg, should have had such an influence upon the world's history. He was not a leader in any practical movement; he inaugurated no political or social reforms. He was not a great statesman, or a great general who changed the boundaries of states. But he has exerted infinitely more influence upon the world than it would have been possible for him to have done if he had been a leader in one of the practical movements of his time. In that little room in Königsberg were born thoughts that have had a tremendous transforming power on men's ways of thinking and feeling,—may, more, which have profoundly influenced their actions and become a force in the course of the world's history. "Strange contrast," says Heine, "between the outer life of the man and his world-destroying thought. Of a truth, if the citizens of Königsberg had had any inkling of the meaning of that thought, they would have shuddered before him as before an executioner. But the good people saw nothing in him but a professor of philosophy, and when he went by at his regular hour, they gave him kindly greetings—and set their watches."

Kant's own statement of his doctrine is very difficult of comprehension. His sentences are overloaded and often extremely tortuous, and his thoughts are expressed in a strange and pedantic terminology. But if we try to state his most important results in a general way, we may say that they fall into two main divisions—a negative and a positive. In the latter part of the *Critique of Pure Reason* he annihilates the logical proofs which the eighteenth century was so fond of furnishing regarding God, Freedom, and Immortality. I am unable here to give you any account of Kant's criticism, but

shall have to ask you to remember that Kant showed once for all that none of these things can be proved by a logical argument. Since Kant's time no one would think of attempting to demonstrate that God exists, by a process similar to that by which any geometrical proposition is demonstrated. But Kant was no sceptic. He was the destroyer and finisher of rationalism; or, in his own words, he sought "to remove the false pretence of knowledge in order to make room for faith."

The positive side of Kant's philosophy consists in its emphasis upon the supreme importance and real significance of the mind as the determining factor in shaping experience. The view of Locke and the eighteenth century generally, as we have already seen, made the mind merely passive and receptive. It was regarded as a "passive bucket to be pumped into," a finite receptive thing of limited capacity, which is entirely dependent upon the external world for its content. But Kant, by a new and most fruitful line of argument, shows that intelligence, the internal factor, is that which gives law and order to experience, and really makes it what it is. It may sound strange and extravagant, says Kant, but it is none the less true, that what we call nature is the work of the understanding. What we call nature is therefore no dead, inert, lifeless substance, existing out of relation to mind, but, as was afterwards more fully shown by Schelling and the other successors of Kant, it is an ideal whole or universe essentially related to the mind of man, and having a significance that can be apprehended in ideal terms. And on the other side, Kant's principles open up a new view of the nature of mind itself. As the universal principle of all experience, that which gives meaning to everything else, it can no longer be regarded as just one thing among others. Since the mind has the task of making everything intelligible, it must reduce everything to its own terms. It is then an infinite principle. If one cannot say that it is actually infinite at any particular point of time, since it does not yet know everything, one may yet say that it has an infinite task laid upon it, and as the universal capacity for knowing, it is potentially infinite.

This new conception of the dignity and worth of the human spirit is emphasized even more strongly by Kant when he comes

to deal with our moral experiences. Duty, says Kant, is not obedience to the command of an external authority, human or divine. The moral law is not something imposed upon us from without; for if it were, we should never feel that it had any real and absolute authority over us. That is, we might feel that it was *prudent* to obey the lawgiver in view of the rewards and penalties annexed to the command, but we should not feel any inner compulsion to do so. Again, Kant states in most emphatic terms that the moral law is not a means for securing our own happiness. There is world-wide difference between the prudential maxims of the eighteenth century and real morality. The moral law does not command conditionally: it does not say, be moral *if* you would be happy and respected, or even *if* you wish to secure everlasting happiness in the world to come. The man who acts from any motives of this kind is not moral at all. No: morality speaks in an entirely different tone. It makes an unconditional demand upon us. Thou shalt, it declares, without regard to the consequences. And whether we obey it or not, we recognize its absolute authority over us. It promises nothing in the way of external reward or personal happiness, it is not a means to any end beyond itself, but we obey it from no other motive than respect or reverence for the law itself. It must then be a law which our own reason imposes upon us, the expression of what is deepest and most fundamental in our nature. The moral reason is not then a mere power of calculating pleasures and pains in order to find out what is prudent. But it is itself the law of righteousness within us, and it shows to us the moral life as the true end and requirement of our being.

This new conception of the nature of man as active and creative, and of duty as the end of life, was the means of transforming the old eighteenth century standpoint. We can see even at this point what a new insight was furnished into the nature and destiny of man. According to the eighteenth century, man is a poor finite 'worm of the dust,' 'whose time's a moment and a point his space.' His mental endowments consist of sense perceptions and an analytic and calculating understanding; his end as a moral being is to obtain happiness for

himself. Instead of that, Kant represents intelligence as the principle that gives laws to nature, as creating by its own modes of functioning what we call the system of nature with its uniform laws and reciprocal relation of parts. He thus not only enlarged our view of the nature and capacities of intelligence, but he also destroyed the old notion that nature is a dead and senseless mass of matter which acts without any relation to intelligence. Nature is now seen to be the expression of mind, the embodiment of the mind's rational principles, and therefore not something strange or foreign with which we can have no sympathy.

When we turn to Kant's new conception of the moral nature of man, the contrast with the eighteenth century is even more striking. The business of man is no longer to secure for himself finite goods, like Pope's health, peace, and competence, but to realize his own true nature in obeying the law of righteousness that speaks through his moral reason. And the moral reason, as we have seen, is not a mere prudential profit-and-loss calculator, but a universal lawgiver which imposes upon man as his business in life, a task that has no direct reference to his own pleasure and profit. This at once gives us a higher conception of the value and dignity of human nature. A life with such a mission to fulfil cannot any longer be thought of as petty and worthless, but should be regarded with wonder and reverence. "There are two things," says Kant, "that always fill me with awe and reverence when I contemplate them, the starry heavens above me and the moral law within me."

Again, in the conception of reason as the lawgiver, we find a principle by means of which the egoism and individualism of the eighteenth century can be overcome. So long as men are supposed to aim simply at their own happiness, their interests are opposed and hostile. They may, indeed, find it necessary and advantageous to respect each other's rights, but this does not imply any real community of purpose or essential bond of union. But when other individuals are thought of as participating along with us in the nature of moral reason and as sharing in the task which its commands impose, they are seen to be no more strangers and foreigners, but fellow-workers with us in the realization of a common purpose, members with us of the City of God, the invisible kingdom of moral ends.

And more. In this wonderful fact of man's moral nature, Kant finds grounds for still retaining a belief in God, Freedom, and Immortality, although in the theoretical part of his philosophy he has shown that the proofs by means of which these doctrines were supported were no proofs at all. These are not facts that one can establish by demonstrations, but postulates or principles of our moral life. You cannot prove them once for all, that is, as you can prove that the three angles of a triangle are equal to two right angles. We can only say that they are principles which we assume consciously in recognizing the claims of *duty* as something different from self-interest, and of whose certainty we receive renewed assurance in the immediate experience of each moral act. We cannot furnish a logical demonstration of the proposition, 'The will is free,' but we must constantly prove our freedom in a practical way by recognizing the command of the moral law. Thou canst because thou oughtst. Duty would have no meaning for a being who was not free to obey its behests. Similarly, we must postulate that God exists as the moral governor of the universe in order to secure the final triumph of goodness. That is, our moral experience forces us to live in the faith that in acting rightly the world-power is on our side, that our act is not merely in harmony with the sentiment of society, but with the deepest and most ultimate nature of the universe. They that are with us are greater than those that are against us, is an expression of the faith that the moral life is possible and real. Unless God exists as the moral governor of the universe, our hope is in vain and our faith is in vain. And finally, the moral law lays upon us the obligation to completely fulfil its demands, that is, to be perfectly holy. But this is impossible in any finite life. In order, then, that this requirement of our nature should not go unfulfilled, we must postulate another life where this important progress may proceed toward completion.

These things, it will be noticed, do not rest on logical demonstrations, or on abstract principles of reason, but on deeper and more fundamental principles of our nature. There is much in our nature then that cannot be exhibited in the form of clear and distinct ideas. The abstract reason, with its logical syllo-

gisms, is not the only source of truth. We can only know the deepest nature of the world through the trial and experience of actual living. It is only through the actual experiment of living as moral and social beings, that we discover what is rational and true. It follows that reason is broader than our own clear and definite ideas. In other words, life itself, which is the best critic of reason, shows that certain feelings and practical ideals have real validity and significance in revealing to us truth. These experiences, therefore, must be included in a more concrete and adequate view of rationality. The life of feeling is thus justified and vindicated. It is shown to have a real meaning and significance in the economy of human life. It can no longer be treated after the fashion of the eighteenth century as sentimental vagueness and obscurantism that can give rise to nothing except error and illusion. Still more, it has been shown that it is just in the life of immediate feeling and conviction that the deepest insight is gained into the meaning of reality. This element of human nature, then, far from being something to be eliminated and got rid of, is thus seen to be "the fountain light of all our being," that which gives value and dignity to human life and expresses the deepest essence of man's rationality. In the same way, and through essentially the same influences, the contrast between reason and the historical order of ideas and institutions has been broken down. Through the work of Kant's pupil, Herder, and especially of Hegel, the conception of history as a process in which the human race is progressively educated, and the true nature of reason embodied and expressed, came to exert a great influence on the thought of the century, and to give a new meaning and impetus to historical study. Reason, from this new point of view, is not merely an abstract principle that only finds expression in the clear and limited ideas of individual minds. It is outside of us as well as within, in social and political institutions, in the historical creeds and customs of mankind. But it is no finite and finished thing whose perfect deliverances can be found in our own consciousness, but an infinite principle that can only be progressively grasped through a study of its manifestations in the world of nature and of man.

These were the truths which seemed like a new gospel to a

generation that was weary of the barrenness and self-sufficiency of the rationalism of the eighteenth century. News travelled slowly in those days and it was more than half a century before Kant's ideas, or those of his successors, made any impression upon the thought of America. But it was the introduction of these new conceptions, when at length they came, that gave rise to the ferment of New England Transcendentalism. It is true that much that it is impossible for us to sympathize with, perhaps even to understand, was said and done in those days. The new doctrines appear to have had an intoxicating effect upon people who had been fed so long on the husks of the eighteenth century. Man, this gospel proclaimed, is not a poor 'worm of the dust,' 'whose time's a moment, and a point his space.' But he is a being of infinite reach and capacity from whom the true nature of things is not hidden, and who has a destiny and a mission that connect him with a higher order of reality. He is not merely a phenomenon, a thing among other things. The moving principle of man's nature is not self-love, the law of his life is not profit-and-loss. But in the law of righteousness he finds the deepest and truest expression of his real nature, and in the attempt to realize this law he finds his real business as a moral and rational being.

Moreover, for the nineteenth century, God became something more than 'a first great cause'—a being outside the world whose existence can be demonstrated as an objective fact by a logical argument. Our modern thought has lost interest in proofs for the existence of God. Or at least the form of the problem has changed. The older method of procedure was to begin with a ready-made conception of what God is, and then to demonstrate that such a being actually exists. Since Kant's criticism of the logical proofs, the problem that particularly interests philosophical thinkers, is not whether we can pass beyond the world to a transcendent being, God, but rather whether the real world of experience has to be construed in terms of Divine Idea and purpose in order to render it intelligible. God, in other words, is no longer conceived as standing apart from the world and acting upon it in an external way, but as the immanent principle constantly manifesting itself in nature

and in the history of mankind. And at the same time, man's life as the highest product of the evolutionary process, gains a new meaning. "The true Shekinah is man," says Carlyle, "where else is the God-Presence manifested not to our eyes only but to our hearts, as in our fellow-men?" This deepening of the feeling of the significance of human life as such, and of the essential unity and kinship of man with his fellow-men is in virtue of the deeper and divine principle of rationality that forms the basis of the moral life. It is perhaps a mistake to explain historical events through any one cause. But perhaps it is not too much to trace some connection between New England Transcendentalism and Kant's proposition that we must always treat humanity, whatever the position of the person, as an end and never as a means.

The new intellectual and spiritual attitude of the nineteenth century found literary expression in the prose of Coleridge and Carlyle, and also in the poetry of Wordsworth, Tennyson, Arnold, and Browning. In Wordsworth and Browning especially we find the glorification of what lies beyond the realm of clear and distinct ideas. "A man's reach," says Browning, "should exceed his grasp, or what's a Heaven for?" It was the lack of any such imaginative reach beyond what was clearly defined and limited that was the fatal defect in the poetry of the eighteenth century. But to the poets of the nineteenth century the visions of a glory that is never quite attained, of a light that never was on sea or land, seems the most valuable and significant thing in experience. As Wordsworth expresses it in "Tintern Abbey":

> I have felt
> A presence that disturbs me with the joy
> Of elevated thoughts; a sense sublime
> Of something far more deeply interfused,
> Whose dwelling is the light of setting suns,
> And the round ocean and the living air,
> And the blue sky, and in the mind of man;
> A motion and a spirit, that impels
> All thinking things, all objects of all thought,
> And rolls through all things.

These experiences tried by the eighteenth century standards of clear and distinct ideas would be pronounced unmeaning.

Yet in them the writers of the nineteenth century find immediate evidence of the soul's true nature and destiny. Doubt is the evidence of the soul's true life. This is not a life of assured certainty. The moral and divine order of the world is not something that we can demonstrate in an objective way once for all and have done with it, but rather an hypothesis that has constantly to be defined and modified in the face of ever-recurring difficulties. The true spirit of philosophy is then the spirit of criticism which is at once positive and negative. While it seeks reverently to sum up and appreciate the historical doctrines of the past, it declines to accept them as fixed dogmas or final conclusions. The only finality it claims is that of always being able to go on to revise and reconsider its conclusions. Its goal is at once a resting place and a new starting-point—an enjoyment and enrichment of the mind, not for the sake of rest, but for carrying on the human life of criticism and construction.

J. E. CREIGHTON.

SUBSTANCE, POWER AND QUALITY IN LOCKE.

ACCORDING to the ordinary interpretation, Locke explicitly set forth a distinction between ideas as mental and natural objects as physical, while he held that all knowledge of the latter is by means of the former. He thus forced the question of knowledge to take this form: How can ideas which are mental truly represent or know objects which are radically different in kind from themselves? The difficulty of the question was accentuated because Locke divided ideas into two kinds, one of which resembled the objects while the other possessed no likeness to them. I am far from denying that the tenor of Locke's teaching points towards the positions just stated, or that it was practically inevitable that subsequent students of Locke should have been led to them as conclusions. But in this paper I wish to set forth, from a study of Locke himself, the conviction that Locke did not start out with any such conception; that it has an historical source which it is quite possible to point out, and that if Locke had avoided becoming entangled with traditional conceptions which are inconsistent with his own positive teachings, he might have developed an empirical theory of knowledge which would neither contain nor suggest the epistemological problem referred to above.

What is significant and original in Locke is his insistence that knowledge consists in the perception of a *relation*. It is true that he defines this as a relation between ideas. But it is also true that Locke was in no sense the originator of the doctrine that the object of knowledge is an idea; such was the teaching of the schools, using idea not to denote anything mental or psychical, but to signify 'form,' 'species.' And officially and intentionally Locke did not depart from this conception: by idea he means, as he says, simply 'the immediate object of the mind in thinking' —thinking being used in the Cartesian sense to denote the act of being aware of. It is an *object* of mind; it is the real object as it becomes the object of awareness; it is not a state or content of mind, any more than it was with the scholastics. Where

Locke departs from scholastic and classic theory is in holding that knowledge is not the apprehension of form or idea as such, but is the apprehension of a relation between forms or ideas.

But Locke was also obviously influenced by the new physical science, by Boyle, Newton and other representatives of the new physics. Now this new physics had no use for species and forms in the classic sense. It substituted minute corpuscles mathematically or quantitatively defined. Let one deny the metaphysical reality of species and forms (ideas) in the old sense and still retain that part of the old theory which holds that the form or idea is the immediate object of the mind in knowing, and one enters upon a course which is full of snares and inconsistencies—as Locke found to his cost and to the perverting of pretty much all English theories of knowledge, psychological and epistemological, since his day.

But this is not the whole of the story. If knowledge is perception of relations, and if knowledge is to have to do with real natural existence, then Locke should have concluded that existence, as the subject-matter of knowledge, is inherently relational. But Locke did not have the courage of his convictions; or rather he did not have the perspicacity of his convictions; he did not see what they implied. He retained the old notion of separate, independent substances, each of which has its own inner constitution or essence. Knowledge which grasps only relations—such as were the staple of the new physics—cannot grasp an inner essence, which remains accordingly hidden and mysterious. In final analysis, the opposition between the inner constitution and essence (which Locke retained from prior metaphysics) and the relations which are knowable (his own contribution) is the source of the opposition which we are familiar with as the Lockian contrast between idea and object.

Nor is this quite the whole of the story. In the older metaphysics causation meant an operating and compelling force, emanating from substances and by some mysterious influence producing change in other substances. Clearly a relational theory of knowledge calls for quite a different notion of causation, if it is to have any place at all in the structure of knowledge.

Any thoroughgoing acknowledgment of the implications of the relational theory of knowledge would soon have arrived at the conclusion that causality signifies simply the relation of orderly seriality among events. In this case the discovery that certain qualities (like colors) are 'caused' by material corpuscles in conjunction with organic physiological structures would have been simply to discover one interesting and important succession in a single and homogeneous order of natural events. It would not have implied a mysterious power in physical objects to produce 'ideas' in something totally different, namely, mind. But Locke retained the old conception of causation as well as of independent substances. In consequence he is constantly forced to move in the direction of the doctrine that the order of ideas is of one sort of existence and that of things (substances) is of another kind, while they are yet so related that the order of independent substances is the causally productive source of the order of ideas, while the latter is cognitively representative of the former, and the sole evidence of its existence. Here are all the materials of the epistemological problem, and if Locke did not make the implications explicit, his successors soon did so.[1]

I.

The usual statement of Locke's position concerning primary and secondary qualities fails to convey it in Locke's own terms. The Lockian terms are concerned with distinction of qualities in respect to *substances*, not in respect to being physical and mental, or objective and subjective. He makes a threefold distinction of qualities, not a dual one. The first kind corresponds in form to the traditional 'essential' attributes, though differing radically in content. And this fact locates his primary contradiction. For his statement of the concrete nature of what he terms primary qualities is such as absolutely to destroy the classic distinction between essence, properties, accidents and

[1] The following from James gives a clear statement of the terms of this 'problem': "Conceived objects must show sensible effects or else be disbelieved. And the effects, *even though reduced to relative unreality* when their causes come to view (as heat which molecular vibrations *make unreal*) are yet the things upon which our knowledge of the causes rests. Strange mutual dependence this, in which the appearance needs the reality in order to exist, but the reality needs the appearance in order to be known!" *Psychology*, Vol. II, p. 301; italics mine.

relations. Primary qualities are according to him such as "are utterly inseparable from the body in what state soever it be; such as . . . it constantly keeps." Like essence in classic thought they make it what it is; they constitute its formal cause. But instead of being such affairs as stoniness, humanity, etc., together with, in the case of physical substances, certain 'sensible forms,' they are 'solidity, extension, figure, and mobility.' Physical substances according to him are particles or corpuscles whose nature or essence is to have such properties. Since such properties, however, are not absolute but relational, he was in reality doing away with the old notion of substances, and along with it destroying the old notion of formal constitutive essence.

His secondary qualities are almost frankly relational in the modern sense of relational. They are powers in substances to produce by means of their primary qualities certain effects in us, such effects as colors, sounds, smells, tastes, etc. It is, be it noted, the power to produce which is called secondary, not the effects themselves. Then there is a 'third sort,' namely, the power of the primary properties to produce changes in other things—such as the power of fire by its primary qualities of bulk, texture and motion of particles to produce a new consistency in wax. More explicity, it is the "power that is in any body by reason of the particular constitution of its primary qualities, to make such a change in the bulk, figure, texture and motion of *another body*, as to make it operate on our senses differently from what it did before." [2]

Taken strictly and literally, then, there is first a distinction between properties which are inherently, always and absolutely, in the substance, without which it cannot exist at all, and others which characterize a connection with other things and which do not exist except where acting and being acted upon are found. Of the latter there are two sorts. There are those which designate power to produce effects like softness, weight, or acceleration in other things, and those which designate power to produce qualities like pain, griping, color, noise, taste by acting upon the senses of an organic body. In both cases, the distinction depends

[2] *Essay*, Book II, Chap. VIII, 9, 10, 23; *cf.* Book II, Chap. XXIII, 7, 9.

upon maintaining a fixed separation between intrinsic essential properties and relational extrinsic ones. And, as before noted, the properties selected by Locke as intrinsically constitutive apart from acting and being acted upon, namely, bulk, figure, motion and situation are precisely the properties which in physical science are now treated as relational, not absolute.[3]

II.

The extent to which Locke retained the formal conceptions of substance and essence while assigning to them a concrete content which negated the traditional meanings, is clear enough in his treatment of substance. Nominally he reduces it to an unknown substrate, which is a step toward eliminating it in its classic sense. But he retains the conception that things have essential natures. Thus, while he holds empirical (or 'nominal') essences to be abstract ideas employed for the purpose of sorting (classifying) and discriminating, he never questions the existence of *real* essences. They are the "constitution of the insensible parts of a body upon which" the sensible qualities depend. Essence is the "*foundation* of all those qualities which are the ingredients of our complex idea." Or, more formally, "by this real essence I mean the real constitution of anything, which is the foundation of all those properties which are combined in and are found constantly to coexist with the nominal essence; that particular constitution which everything has within itself, *without any relation to anything without it.*"[4] Scores of passages could be quoted to the effect that this ultimate and intrinsic constitution is that upon which *all* the properties of things depend and from which they flow. "What is that texture of parts, that real essence, that makes lead and antimony fusible, wood and stones not?" "It is true every substance that exists has its peculiar constitution, whereon depend those sensible qualities

[3] Of course I am ignoring the notion that there is a difference in kind between changes produced in the senses and those produced in other things. But this neglect is justified for two reasons. First, Locke thought *both* of them to be arbitrary, or due to the fact that God had affixed certain powers to things, and secondly any difference of kind that exists is relevant not to the discussion of qualities as such, but to quite a different matter, namely, the theory of ideas.

[4] *Essay*, Book III, Chap. VI, 2, 3, 6; Book III, Chap. III, 15; italics are of course mine.

and powers we observe in it."[5] "By what right is it that fusibility comes to be a part of the essence signified by the word gold, and solubility but a property of it? or why is its color part of its essence, and its malleableness but a property? That which I mean is this, that these all being but properties, *depending on its real constitution*, and nothing but powers, either active or passive in relation to other bodies, no one has authority to determine the signification of the word gold (as referred to such a body existing in nature) more to one collection of ideas as found in that body than to another."[6] In his chapters on knowledge he is constantly referring to the "real constitution of the minute parts on which their qualities do depend"; "the real constitution of substances whereon our simple ideas depend and which really is the cause of the strict union of some of them with one another, and the exclusion of others."[7]

III.

The customary account of Locke misrepresents him by treating secondary qualities as something found in the mind, while to Locke, as we have seen, they signify the power of certain properties of substance to produce certain effects "in us"—to employ his favorite and ambiguous phrase. This renders it necessary to consider more definitely his theory of power and causation, and of relations. Because of a wavering use of the word 'relation,' it is well to begin with the latter. Locke follows the classic tradition which opposes 'relations' to essence as the extrinsic to the intrinsic. The stock example of relation is 'quantity' which varies without alteration of essence; a thing may be more or less, greater or smaller, without ceasing to be what it is; hence, quantity is an 'accident.' Like every accident

[5] Same chapter, 9, 13.

[6] Book III, Chap. IX, 17.

[7] Book IV, Chap. III, 14; Book IV, Chap. IV, 12. Compare, in this controversy with Stillingfleet, such expressions as "the real essence is that internal constitution of things, from which their powers and properties flow": the essence "is in everything that internal constitution, or frame, or modification of the substance which God in his wisdom and good pleasure thinks fit to give to every particular creature, when he gives it a being." English edition of 1823, Vol. IV, p. 82. "There is an internal constitution of things on which their properties depend. This your lordship and I are agreed of, and this we call the real essence" p. 87.

or non-essential change, it depends upon matters outside the thing itself; it is a relation, not a property, since not flowing from essence. While following this tradition, Locke also associates relation with comparison. "When the mind so considers one thing that it does as it were bring it to and set it by another, and carries its view from one to the other; this is, as the words import, relation and respect; and the denominations given to positive things intimating that respect, and serving as marks to lead the thought beyond the subject itself denominated, to something distinct from it are what we call relatives; and the things so brought together, related." Examples are whiter in contrast with white; husband in contrast with man; father and son; servant, captain, enemy, patron; bigger and less; cause and effect, etc. And he remarks "Change of relation may be without any change in the subject." Caius remains Caius, although he ceases to be father, when his son dies. Also we have clear ideas of the relation when the ideas of the things related are 'obscure and imperfect.' [8] This fact is of great significance in connection with mathematics and morals as demonstrative sciences.

Relations are thus opposed by Locke to the intrinsic constitution of a thing and also to the properties which directly depend upon this essence. And what is more important for our present purposes it is also marked off from what he terms connexion, both 'necessary connexion' and 'real coexistence' or as he frequently terms it 'going together.' [9]

Unfortunately, however, on one occasion at least Locke indulges in change in his ordinary linguistic usage. And by what is almost a fatality, this lapse occurs in connection with his discussion of power. This he treats as a simple idea, and one got from both sensation and reflection. But he says: "I confess power includes in it some kind of relation (a relation to action or change), as, indeed, which of our ideas, of whatever kind soever, when attentively considered does not? For our ideas of ex-

[8] Book II, Chap. XXV, 1, 2, 5; compare Book IV, Chap. II, 15.

[9] Much of T. H. Green's polemic against Locke with respect to relations being the "workmanship of the understanding" turns upon nothing more serious than failure to notice that while *usually* Locke employs 'relation' in the restricted sense noted above, he never doubts that substances themselves have real and necessary *connexions* with one another.

tension, duration and number, do they not all contain in them a secret relation of the parts? Figure and motion have something relative in them much more visibly; and sensible qualities, as colors and smells, etc., what are they but the powers of different bodies in relation to our perception, etc.? And, if considered in the things themselves, do they not depend upon the bulk, figure, texture and motion of the parts? All of which include some kind of relation in them. Our idea, therefore, of power, I think may well have a place among other simple ideas, and be considered one of them, being one of those that makes a principal ingredient in our complex ideas of substance, as we shall hereafter have occasion to observe." [10]

Obviously relation is here used in the sense of connexion, not in the sense in which it designates things taken by the mind in comparison with other things. For in the same sense in which power contains relation, simple ideas do so also. Locke never doubted that 'power' designates a real efficacy in things to generate or receive changes in or from other things, any more than he doubted the existence of disconnected substances each having its own essence or internal constitution.

Before following up this idea, it will be well however to devote a little space to his conception of connexion as a real union in things as distinct from relation dependent upon the mind's act of comparison. In the first place, this notion underlies his treatment of the association of ideas. If 'connexion' were mental, association would play the same rôle in his thinking that it comes to play in James Mill and successors. But Locke uses the notion only to account for abnormalities and eccentricities, unreasonable antipathies, superstitions, etc. Beside the case of belief in goblins, he cites the sad plight of the young man who having learned to dance in a room where there was a trunk in a certain position could only dance in that room or in another room where there was a similar piece of 'household stuff' in a like position. 'Associations' are due to chance or custom; whence "jargon becomes sense, demonstration is given to absurdity and consistency to nonsense." "It is the foundation

[10] Book, II, Chap. XXI, 3; compare, Chap. XXIII, 37, yellow, fusibility, etc., being "nothing but so many relations to other substances"; also XXXI, 2, 8.

of the greatest errors in the world." It unites things in themselves 'disjoined.' In contrast to these casual connections stand those in which "our ideas have a *natural* correspondence and connexion one with another; it is the office and excellency of *reason* to trace these, and hold them together in that union and correspondence which is founded in their peculiar being."[11]

Again it will be recalled that Locke correlates knowledge with certainty, assent with probability. And in a striking, though neglected passage, he says: "As knowledge is no more arbitrary than perception; so, I think, assent is no more in our power than knowledge. When the agreement of any two ideas appears to our minds, whether immediately or by the assistance of reason, I can no more refuse to perceive, no more avoid knowing it, than I can avoid seeing what I turn my eyes to and look upon in daylight; and what upon full examination I find the most probable I cannot deny my assent to." He adds that it is "by stopping our inquiry" that we hinder both knowledge and assent.[12] Locke here declares that even assent (opinion, belief) is objectively controlled and that with a proper use of faculties, degrees of assent exactly follow degrees of probable connection in subject-matter. Probability is calculated, in other words, rather than guessed at, and belief follows objective connections as much as does knowledge or certainty. The most conclusive evidence, however, is found in his whole treatment of the nature of knowledge as that is given in the fourth book of the *Essay*. To take this matter up at this point would involve needless repetition, so here we simply point out that all physical knowledge is to him knowledge of coexistence or conjunction, and that our physical knowledge does not go beyond probability just because *necessary connexion* is the sole ground for assertion of *universal* coexistence. And necessary connexion we cannot arrive at because of our inability to penetrate the inner constitution or essence of substances. In other words, only because Locke assumes that essence is the basis of necessary connexion in things, does he hold that *we* cannot attain to certainty in

[11] Book II, Chap. XXXIII, 5, 7, 16, 18; *cf.* Book III, Chap. VI, 28, "the mind puts none together which are not supposed to have a union in nature," also Book III, Chap. IX, 13; Book IV, Chap. IV, 12.

[12] Book IV, Chap. XX, 16.

physical science. Eliminate this assumption of necessary connexion as equivalent to or derived from essence in substances themselves, and his argument takes on quite a different temper and import.

We return, now, to his consideration of 'power'—that is, of efficiency. As we have already seen, the distinction between qualities is made by Locke in terms of the distinction between essence which is intrinsically constitutive and power which involves the action of essence of things upon other things. The *idea* of power is derived by observation of the change of sensible ideas, "in things without" and also, through reflection, by observation of the change in ideas "by the determination of its own choice." He adds that since it is two-fold, "viz., as able to make, or able to receive, any change, it may be worth considering whether matter has anything but passive power and whether we should not "direct our minds to the consideration of God and spirits, for the clearest ideas of active powers." [13] So self-evident, indeed, does the real existence of power appear to Locke, that he passes on at once to the discussion of liberty of the will and moral issues.[14]

In the next chapter but one, namely Chap. XXIII, entitled 'Of Our Complex Ideas of Substance,' it is repeatedly asserted that "powers justly make a great part of our complex ideas of substance" (10). And he returns in this connection to the topic of primary and secondary qualities. One clause is worth adding to the previous citations: "The sensible secondary qualities are nothing but the powers those substances have to produce several ideas in us by our senses; which ideas are not in the things themselves *otherwise than as anything is in its cause.*" In his discussion of material substance he simplifies somewhat his previous statements regarding both essential or primary qualities and power. The former are reduced to "cohesion of solid and separable parts," 'figure' being a consequence; the latter to power "of communicating motion by impulse." [15] Here we have

[13] It is hardly too much to say that Berkeley is implicit in this suggestion while it is reasonably certain that Hume's so-called sceptical denial of substance and of causation is based upon Locke's doctrine of our inability to perceive necessary connection among empirical objects.

[14] Book II, Chap. XXIII, 1, 2, and following.

[15] Book II, Chap. XXIII, 9, 17.

perhaps his nearest approximation to the physical concepts of mass and motion, with the implication that mass is closest to the inner essence, while causal power consists in imparting and receiving motion.

His unquestioned belief in causation as real power or efficacy is not brought into doubt by the fact that he discusses 'cause and effect' as a relation. For the chapter [16] makes it evident that it is the correlativity of *cause and effect* which he has in mind. Power is the real thing behind both terms of this relation. "We cannot but observe that several particular, both qualities and substances begin to exist; and that they receive their existence from the due application and operation of some other being." "A cause is that which makes any other thing begin to be; and an effect is that which had its beginning from some other thing." [17] In other words while the mind gets the ideas by comparison, what it compares is the action and reception of power. "The idea of beginning to be is necessarily connected with the idea of some operation." [18]

IV.

We come now to the bearing of these considerations upon the theory of knowledge. The traditional and current theory is that the difficulty with which Locke labors is the epistemological dilemma: things which we immediately know are mental and we know physical or 'objective' things only by the intervention of these mental things, while these mental things are themselves the effect of physical things. Given these premises there is certainly an epistemological problem distinct from any metaphysical or cosmological problem. But Locke's own theory is that we know essences of substances only through their powers, and powers only through their effects (which, as we have directly to do with them, he terms ideas of sensation or sensible qualities); and as we are not able to trace any *necessary* connexion between the effects and their operative efficacious causes, we have no certain knowledge of the connexion of the effects with one another. That is, we can know *in general* that the essence of things is the bulk, contexture, figure and number of particles which have the

[16] Book II, Chap. XXVI.

[17] *Ibid.*, 1, 2.

[18] *Works*, IV, 61–62.

power of communicating motion, but we cannot know the particular properties which produce in any particular case the particular effect or quality which is immediately present or with which we are in contact.[19] The difficulty is not that primary qualities are physical while secondary are mental, but that we cannot ascertain the *necessary connexion* which physically exists between causative powers and their effects.

"Yellowness is not actually in gold; but it is a *power* in gold to produce that idea in us by our eyes, when placed in a due light; and the heat, which we cannot leave out of our ideas of the sun, is no more really in the sun, than the white color it introduces into wax. These are both equally *powers* in the sun, *operating*, by the motion and figure of its sensible parts, so on a *man*, as to *make* him have the idea of heat; and so on wax, as to *make* it capable to *produce in a man* the idea of white. Had we senses acute enough to discern the minute particles of bodies and the real constitution on which their sensible properties depend, I doubt not that they would produce quite different ideas in us: and that which is now the yellow color of gold would then disappear, and instead of it we should see an admirable texture of parts, of a certain size and figure." [20]

As the quotation intimates, the difficulty is that our organs of perception are not fitted to yield effects which are comparable in subtlety and minuteness to the real structure or constitution of things, and hence we can never establish the detailed and specific necessary connexions that exist between causes and effects. For that reason, *and for that reason alone*, we cannot make universal and necessary statements, or attain knowledge (certainty) regarding the relations of the effects (ideas) to one another. If, to cite his favorite example, we knew the inner constitution upon which depend fusibility of gold and its solubility in *aqua regia*, we should be able to know whether the connection between solubility and fusibility is necessary and universal, or whether it is contingent and severable. The same thing holds for the connection of yellowness with these other properties. If we had such knowledge of the inner constitution of gold as would enable us to see how its minute particles produce yellowness and also how

[19] *Essay*, Book II, Chap. XXXI, 6.

[20] Book II, Chap. XXIII, 10, 11; italics mine.

they produce fusibility, we should have an exact criterion of the degree of closeness or looseness of connexion between yellowness and fusibility.

A statement which he makes in his controversy with Stillingfleet is worth quoting at length. The Bishop of Worcester had reproved Locke for complaining of the lack of certainty in our knowledge of things. In reply Locke says: "To say that if we knew the real essences or internal constitutions of those beings, some of whose properties we know, we should have much more certain knowledge concerning those things and their properties, I am sure is true, and I think no faulty complaining." After saying that we are, as it is, certain that some beings exist and that some properties are the properties of those beings, he goes on: "But there are other very desirable certainties, or other parts of knowledge concerning those same things, which we may want. . . . Knowing the color, figure and smell of hyssop, I can, when I see hyssop, know so much as that there is a certain being in the world, endued with such distinct powers and properties; and yet I may justly complain that I want something in order to certainty that hyssop will cure a bruise or a cough, or that it will kill moths; or, used in a certain way, harden iron, or a hundred other useful properties that may be in it, which I shall never know; and yet might be certain of if I knew the real essences or internal constitutions of things upon which their properties depend." [21]

If Locke had held that the limits and uncertainty of our propositions about physical things were due to the fact that we know by means of ideas which are different in kind from the things, it would have been the easiest thing in the world for him to say so. But that to which he actually assigns the limitations of our physical knowledge is that "the *connexion between most*

[21] *Works*, Vol. IV, pp. 81–82. Compare *Essay* Book III, Chap. VI, 3, 9, also, Chap. XI, 22: "If the formal constitution of this shining, heavy, ductile thing (from whence all these its properties flow) lay open to our senses, as the formal constitution or essence of a triangle does, the signification of the word gold might as easily be ascertained as that of triangle." And Book IV, Chap. VI, 10: "Could any one discover the necessary connection between malleableness and the color or weight of gold, or any other part of the complex idea signified by that name, he might make a certain universal proposition concerning gold in this respect; and the real truth of this proposition 'that all gold is malleable would be as certain as fo this, 'the three angles of all right-lined triangles are all equal to two right ones.'"

simple ideas is unknown." In his own words, knowledge of such connexion is "very narrow and scarce any at all," for the "simple ideas whereof our complex ideas of substances are made up are, for the most part, such as carry with them in their own nature, no visible necessary connexion or inconsistency with any other simple ideas." And the reason is "not knowing the root they spring from, not knowing what size, figure and texture of parts they are on which depend and from which result those qualities which make our complex idea of gold, it is impossible that we should know what other qualities result from or are incompatible with the same constitution of the insensible parts of gold, and so must always coexist with the complex idea we have of it, or else are inconsistent with it." [22] To paraphrase Hume's saying about causation (the underlying idea of which he must have derived from Locke), for all we can know any quality may go with or coexist with any other quality in the make up of an empirical thing. But Locke still holds that *if* we knew its inner constitution, we should be able to *deduce* just what qualities go together and the degree of their uniform and universal connection. In one sense, Locke's contention is of an idea which has become a commonplace since his day: namely, that of existences there are no universal propositions, the latter being possible only where deduction applies.

Thus Locke says: "I doubt not but if we could discover the figure, size, texture and motion of the minute constituent parts of any two bodies, we should know *without trial* several of their operations one upon another; as we do now know the properties of a square or a triangle. . . . We should be able to tell *beforehand* that rhubarb will purge, hemlock kill, and opium make a man sleep. . . . But whilst we are destitute of senses acute enough to discover the minute particles of bodies, and to give us ideas of their mechanical affections, we must be content to be ignorant of their properties and ways of operation; nor can we be assured about them any further than some few trials we make are able to reach." [23]

The same general idea is repeated several times in this chapter

[22] Book IV, Chap. III, 11.
[23] Book IV, Chap. III, 25.

upon the 'Extent of Human Knowledge'; and also in Chapter VI on 'Universal Propositions.' Paragraph 11 of the latter chapter is noteworthy for the explicit distinction it makes between the internal essence and the properties that flow directly from it and the properties that are due to "extrinsical causes." "Put a piece of gold anywhere by itself, separate from the reach and influence of all other bodies, it will immediately lose all its color and weight, and perhaps malleableness too; which for all I know would be changed into a perfect friability." Certainly Locke does not intend to imply that weight is a 'subjective' or 'mental' state but that it depends upon connexion with other things—namely, gravitation. Hence the passage is particularly instructive as to what is signified by 'secondary' qualities in general. As he summarizes the matter: "Things however absolute and entire they seem in themselves, are but retainers to other parts of nature for that which they are most taken notice of by us." In this passage Locke seems almost on the verge of denying the very existence of ultimate disconnected things, a denial which would have radically altered his whole conception of knowledge,[24] but he immediately returns to the idea of the absolute, intrinsic essence of things as that which, so to say, *ought* to be known, but which cannot be known, because qualities due to connexions with other things so overlay them. (The main thesis as to knowledge of coexistence is repeated also in Chap. XII, on 'Improvement of Our Knowledge.')

To continue quotations is perhaps to gild gold and paint the lily, but the fact that Locke applies exactly the same logic to the matter of the perception of degree of likeness among *secondary qualities* seems to be crucially conclusive. Different degrees (shades) of color depend upon the size, position, number and motion of minute insensible corpuscles. Therefore they may be *really* different although they are *sensibly* alike to us. We cannot *know* (have certainty) as to the degrees of similarity existing between two whitenesses. "Not knowing, therefore, what number of particles, nor what motion of them, is fit to produce any precise degree of whiteness, we cannot *demonstrate* the certain equality of any two degrees of whiteness; because we

[24] See Whitehead, *Principles of Natural Knowledge*, Chap. I.

have no certain standard to measure them by, nor means to distinguish every the least real difference." [25] This passage in itself completely refutes the current notion that Locke's secondary qualities are states of consciousness or of mind. If they were, their appearance would be their being; if they were alike in 'consciousness' they would *be* alike. It is safe to issue a challenge to anyone who holds the traditional interpretation to explain this passage.

It is no part of the present enterprise to set forth just what Locke's positive theory of knowledge becomes when his theory of existence is made to square with his theory of knowledge. It is plain, however, that unless existences are in some aspect or phase connected instead of disconnected, and that unless the connectedness of things (or things in their connectedness) is the proper object of knowledge, there is an unbridgeable gap between things and any knowledge which operates, as Locke's does, in terms of the perception of connexions. It is enough for our present purpose that Locke repeatedly sets forth the gist of what his theory becomes when revised. 'Ideas' are so connected together in experience that they serve with varying degrees of probability to point to and distinguish the complex interconnected wholes of which an 'idea' is a part. A certain yellowness enables us to distinguish gold from silver, a taste wine from water, and so on. And this function, as he repeatedly states, answers all our purposes: in fact, as he says in one passage, it would probably prove embarrassing if we could detect the inner essence, while other things remain as they now are.[26] In short, it is enough if the connectedness of things is such as to render possible the relationship of *implication* and the act of *inference*. Berkeley put his finger on the point when he said: "The connexion of ideas does not imply the relation of cause and effect, but only of a mark or sign with the things signified." [27]

With this substitution, a distinction between those qualities which Locke calls secondary and those which he calls primary

[25] Book IV, Chap. II, 11–13.

[26] Book II, Chap. XXIII, 12. The main thesis is also stated in Book II, Chap. XXXII, 14, 15; Book III, Chap. VI, 30; Book III, Chap. IX, 15; Book IV, Chap. I, 6; Chap. XI, 7; Chap. XII, 11; Chap. XVI, 6; and Vol. IV, p. 76–77.

[27] *Principles of Human Knowledge*, Part One, 65.

remains of value, though the Lockian interpretation is altered. Primary qualities cease to be the counterparts of traditional essential attributes and the efficacious causes of secondary; they are those qualities of things which serve as the most accurate, dependable and comprehensive signs; the qualities most important and most available for reasoning in the *implication* relation. Sweetness has turned out to be a much less valuable *sign* than is the 'bulk, number and texture' of extended parts.

JOHN DEWEY.

COLUMBIA UNIVERSITY.

FINITE VALUE AND COSMIC VALUE.

I DESIRE in the following short paper to investigate the question of the relation of what we call 'values' to what I conceive to be their ultimate ground, the Worth or Value of the universe or reality as a whole.

In doing this I shall specifically avoid the intricate question as to how 'value' is to be defined, a question which would involve us in long discussions about the experience of value and the relation of value to subject and object. Such a discussion [1] is really essential to any adequate investigation of value, but I may content myself by taking the term 'value' in its rough empirical everyday sense, and going on to enquire how 'values' in this accepted sense are related to what, more vaguely, may be called 'Cosmic Value.'

But, before proceeding, it may be as well to point out that there *are* two senses in which the term 'value' may be used. It may be used in a more concrete, or in a more abstract, way. We may speak of 'values,' meaning valuable concrete states or activities, like wisdom, or happiness, or outdoor exercise. Or we may, more philosophically, interest ourselves in the value *aspects* of such things, an interest which would naturally lead to an attempt to define 'value' itself. But if we do concern ourselves in philosophy with the value aspect, it has to be kept in mind that it *is* only an aspect, and that value in reality always has the closest connection with existence. Value-judgments either explicitly refer to existence or, in Mr. Urban's terminology,[2] they involve 'presumption' or 'assumption' of existence.

To put the matter briefly, every concrete reality has two essential adjectives, two aspects, an existence- and a value- or worth-aspect.[3] The natural sciences deal mainly with the former, moral philosophy mainly with the latter aspect. In practical

[1] I have tried to undertake it in an as yet unpublished article on "The Experience and Status of Value."

[2] *Valuation*, pp. 42–55.

[3] Everett, *Moral Values*, p. 182.

life for the most part we think consciously neither of the one aspect nor of the other, but simply take things concretely as they come. We do not, *e.g.*, as a rule *say* 'exercise is good,' nor, when we indulge in it, do we *say* 'exercise exists, has such and such a character, is defined in such and such a way.' We take its existence for granted, and it is our behaviour, if anything, which shows that we believe it to be good. The philosopher of values, on the other hand, is interested in defining the essence of its 'goodness.' Without going so far as this, let us consider concrete realities explicitly regarded as being valuable rather than as existing.

We may begin (as being as convenient as any other) with the list of values given by Professor Everett.[4] He gives the following table:

1. Economic Values.
2. Bodily Values.
3. Values of Recreation.
4. Values of Association.
5. Character Values.
6. Aesthetic Values.
7. Intellectual Values.
8. Religious Values.

Whilst it is believed that this is not a final or exclusive list, it is claimed that it is sufficiently serviceable, and includes the chief goods we do actually desire. Wealth, health, play, communal life, and so on, are all of them things which the plain man would accept as having worth. The question immediately arises as to their relation to one another. On this Mr. Everett's own words may be quoted at length: "These are not, it is to be observed, separate and independent values; rather are they the aspects under which it is convenient, for purposes of evaluation, to survey the unity of life. How intimately these values are related, how deeply they interpenetrate in the organic structure of experience, is a fact of the first importance, to which we shall have occasion frequently to return. At present let us suggest this interdependence by a few illustrations. We must recognize, for example, the way in which, under the conditions of modern

[4] *Moral Values*, p. 182.

life, all the higher values have become dependent to a greater or less degree upon economic values. Education, art, and religion, all bear, in the present order of civilization, essential relations to the process of exchange, or market, value, which is the standard of economic valuation. Similarly it may be noted that if the bodily life is not properly maintained, all the other interests are insecure or even impossible of attainment. We are all aware, too, what a transforming influence every group of the higher values exercises upon the lower. Our use of material things is at once changed when touched by the spiritual forces of sympathy, intelligence, beauty, and religious aspiration." [5]

Professor Everett here shows very clearly the mutual implication and interdependence of all the values which he mentions. Not only are the 'lower' values complemented by the 'higher,' but the 'higher' values are in some cases impossible without the 'lower.' He supports the "hard saying" that in modern civilization all the values are indirectly dependent upon wealth.[6] Whilst we might not be disposed to go the whole way in agreeing with this, it has undoubtedly ground in a general truth which is not always sufficiently comprehended. It is certainly true, for example, that the values of Greek culture were to a considerable extent dependent upon Greek slavery.

The general outcome of these views is that each value finds its meaning only as it ministers to a whole life containing in its span the other values as well. Criticising the dictum 'nothing matters but love' Professor Everett says "the perfect good . . . or, to state the real problem, the greatest good possible of attainment—always something less than perfect—cannot be found in any single aspect of our nature, however exalted, but only in the integrity of all its parts, and the harmonious realisation of them as a whole." [7] So, he adds, no single reform or improvement is a panacea for the evils from which society suffers. The only solution is a many-sided and thorough education.

If this is so, a very important question arises. If the supreme value or *summum bonum* of life is only found in a whole life, do the categories, commonly used, of 'end' and 'means,' of 'intrinsic'

[5] *Op. cit.*, p. 183.
[6] *Ibid.*, p. 191.
[7] *Ibid.*, p. 201.

and 'instrumental,' express the situation adequately? There is of course a sense in which the terms 'intrinsic' and 'instrumental' do express a real division of things; economic values can for example be placed as purely instrumental,[8] and I suppose the undergoing of a painful operation might in itself be said to have only instrumental and no intrinsic value. Yet whilst there seem to be instrumental values which are not intrinsic, it seems impossible to discover any finite values which are intrinsic without being instrumental also. No doubt health and companionship are in one sense intrinsic, but in another sense they are also instrumental in helping the possessor of them to realise the other values. This is true even of what are usually supposed to be the most intrinsic values of all, namely the values of goodness, beauty and truth. Each may be in one sense an end in itself, but it is also in another sense a means to the fuller life which it enriches. We shall have to discuss a little more fully the significance of those more intrinsic values, but the general principle is in the meantime fairly plain, namely that there is no finite value which is quite intrinsic, quite self-contained, in the sense that it could exist apart from the other values without influencing them or being influenced by them.

Nevertheless we do speak of more intrinsic and less intrinsic values, generally grouping the more intrinsic values with the 'higher' and the less intrinsic with the 'lower' values, and this seems to be quite a justifiable usage. If it is, then we have to enquire as to the nature of our criterion of value: how do we judge as to which are the more or the less intrinsic, the higher or the lower? Professor Sorley in discussing this question points out that there are two ways in which the comparative valuation of values may be attempted.[9] One of these is empirical and quantitative; it assumes each valuable object to have a definite quantity of something which we may just call value and which is always the same in kind. This method however only applies to one class of value, the positive value of pleasure and the negative value of pain. The quantitative method will not apply to the innumerable kinds of value of the sorts of which we have given illustration. "If," proceeds Professor Sorley, "we are to

[8] For normal persons, not misers.

[9] *Moral Values and the Idea of God*, p. 51.

compare values at all, it appears to me that we must give up the idea of a scale for that of a system. We shall never get what we want by adding and subtracting quantities. Even if a quantitative process of this sort enters into the estimate, it will only be in the same way as mechanical interactions enter into vital mental and social processes. It will not give us the clue. The clue will have to be sought in the idea of a system to which the values belong." This system of values is realised to some extent in the life of the moral, conscious person, the person who attempts to rationalise his life. But this is not the final centre of value; the life of the individual is lived in the universe. "The connexions of each experience are limited only by the limits of the existing universe; and its values are, in a final estimate of them, dependent upon the universe of values to which they belong. Short of knowledge of the whole we cannot fully determine the nature of the Chief Good." [10] Further, "if this goal is called an absolute, it cannot be related in any external way to the absolute which has been sought along other lines of research. There cannot be two absolutes, one of which, and one of which only, is ethical. We can form a conception of an absolute only as an individual reality which contains harmoniously within itself both the actual order and the moral order." [11] We shall have to return to this conception of an absolute. In the meantime it will be seen that a rough test of the importance of a value will be its comprehensiveness, its significance for the whole life. It is because the value of goodness, of beauty, of truth, of religion, are values which lead the seeker after them to a more comprehensive kind of life, a life which in various ways (always in a limited way, always imperfectly) mirrors the life of the universe, that they are called 'higher.' They are higher or intrinsic because the pursuit of them seems to be worth while apart from the results external to the pursuit.

But the question arises, Is it justifiable to speak of 'values' (in the plural) as if they existed in themselves in the first place, and become organised into a system in the second place? Certainly to admit that they do become organised is to avoid the

[10] *Ibid.*, p. 155.
[11] *Ibid.*, p. 156.

worst dangers of atomism, and it has to be admitted that values are in *some* sense a Many. Nevertheless there is a tendency to regard values as an ultimate plurality of separate entities, and it is one which it seems to me must be carefully guarded against.

The extreme position that values are isolated independent entities is expressed perhaps as well by Dr. G. E. Moore as by anyone else. He says: "The method which must be employed in order to decide the question 'What things have intrinsic value, and in what degrees?' has already been explained. . . . In order to arrive at a correct decision on the first part of this question, it is necessary to consider what things are such that, if they existed *by themselves*, in absolute isolation, we should yet judge their existence to be good; and, in order to decide upon the relative *degrees* of value of different things, we must similarly consider what comparative value seems to attach to the isolated existence of each." [12] Canon Rashdall, a thinker with a very different type of philosophy from that of Dr. Moore, also tends to treat values, not indeed as the isolated entities of Dr. Moore, but as if they constituted an ultimate plurality like so many pebbles on the shore, and he nowhere very successfully puts forward a quite satisfactory scheme as to how these values are to be compared. It is true that he does believe in a hierachy or scale of values,[13] and admits that, in order that there should be comparison of values, value must have in all cases the same meaning. And he himself anticipates the criticism, which might be made, that "We must abandon the idea of a scale for that of a system," [14] by saying himself, "The ideal end or good for man is not a number of goods lying side by side and having no relation to one another, but a particular kind of life in which various elements are harmoniously combined. Undoubtedly the elements are altered by their relation, just as the notes of a chord or the instruments of an orchestra produce together an effect which is different from what each of them produces by itself. But there could be no musical notation unless we could distinguish these elements and speak of the whole—the chord or the harmony —as produced by their combination. That the whole is the

[12] *Principia Ethica*, p. 187.

[13] *Theory of Good and Evil*, Bk. II, Chap. II.

[14] Sorley, previously quoted.

sum of the parts is true, though it is not the whole truth: for it is equally true that the whole is more than that sum." [15] And he speaks of the good life as an ideal in which many *distinguishable* elements are harmonised and combined.[16] Yet there are sentences such as, "We could give no intelligible account of the good except by regarding it as a *combination* of goods," [17] or, "the law of duty itself requires us to . . . seek to promote for all mankind a *εὐδαιμονία* or well-being which shall include in itself all the various elements to which Moral Reason ascribes value. . . . Virtue is the most important of them, . . . culture or knowledge is another, and . . . pleasure has a place among them." [18] Certainly such statements seem to involve a supposition that goods are prior to the good, that we have first a plurality and then a unity of the plurality. But in truth the two go together. The plurality of goods are goods by reason of the fact that they are already manifestations of a single good. It may be true as a matter of practice that the good life is realised in the pursuit of good things of various kinds, but it is certain that goodness of life cannot be attained without insight into some single harmonising principle or value which in itself makes the good life what it is, namely, a harmonious whole. In other words, although the most admirable of external instruction be given as to the degree, order, proportion, and manner in which the various particular goods should be pursued, no amount of seeking of good things will produce goodness without that personal realisation of the Value which makes these particular goods not so many isolated entities but all of them expressions of a single Value.

Nevertheless the contention that "We can give no account of '*the* good' without breaking it up into various 'goods'" [19] rings with a genuine note of practical wisdom. Indeed the difficulties of the dispute between the One and the Many in this case do arise just because of a failure to distinguish practical from theoretical needs. No doubt for the *practical* business of living

[15] *Op. cit.*, Bk. I, p. 220.
[16] *Ibid.*, p. 221.
[17] *Ibid.*, p. 221, italics mine.
[18] *Ibid.*, Bk. I, p. 101.
[19] *Ibid.*, p. 220.

where we are concerned with particular things, where "the Many change and pass," it is necessary that we should know how to deal with values; but it is equally the business of *theory* to understand the Many in the light of the One which remains. To say this is not to contend that this method is separable from the other. There is neither unity alone nor plurality alone, but plurality in unity; and if the second and maturer stage of philosophy is deductive (where we pass from unity to plurality) the earlier stage is the inductive one (from plurality to unity) without which the second stage is impossible. All this is of course obvious and commonplace enough in a way, but it is important to recapitulate it, because moral philosophers of the present age, anxious always to be empirical and to begin with what is given, are apt to land themselves in a pluralistic atomism and to find it difficult to discover how the bundle of particulars is to be related.

It is true that they say that these values must be harmonised in a single life, and that a single harmonious life is the *summum bonum*. But although this is perfectly true so far as it goes, it does not go quite far enough. Perfectionism in some of its forms is apt to be a half-fledged sort of ideal, and some sympathy is to be felt for those who would choose the easier course and call the *summum bonum* some particular thing such as pleasure. Yet this easy course is totally inadequate to fit moral demands; the *summum bonum* for man cannot be anything less than a complete life; and we are still faced with the problem of how to know and how to achieve the completeness and wholeness of life demanded by morality. If we are barred on the one hand from selecting some single particular (such as pleasure) as the supreme principle of life, and if on the other hand the internal harmony of a single finite life cannot in the nature of things contain completely its own principle, we are forced to conclude that its principle must be grounded in something beyond itself. Philosophers have sometimes taken that something to be society, and have found the ground of moral obligation to be the state. But this, though it is a more hopeful source of a principle than the individual life, is in its turn limited by time and place, and by the codes and conventions which every society must set up

for itself. Societies are not complete self-contained entities; they have a place and function and meaning in history and geography; societies have relations to one another, and to the wider world of which they form a part.

And so we may go on, stopping nowhere short of the complete cosmos. The source of the principle of the perfection of social man is to be found in the life and purposes of the cosmos. If such a thesis sound vague, it is at least not half-fledged. It has no greater vagueness than corresponds to the vast incomprehensible mystery of existence, and to choose a theory—particularly a philosophic one—on account of its neatness and simplicity is a dangerous procedure. The question of course arises, 'How does such a theory work in practice? How can we know the life and purposes of the cosmos?' The answer to the second part of the question is that we can only know cosmic life and purposes by living them and by experiencing them mystically, supplemented by everything that scientific and philosophic knowledge can bring to bear upon the problem of existence. As to how such insight actually works, we can only urge that where moral energy is harnessed to the work of living, and keen intelligence is brought to bear upon the facts of life as they are, there is no type of moral life at once so gracious, so beautiful and so efficient as the life of the man who has somehow, strangely, seen and felt and known reality illuminated 'from the Centre.' Those who by endowment and training have such insight in a marked degree are aware, though not infallibly, when they are fulfilling the cosmic purposes which speak within them, and when they are violating them. But this does not imply that felt intuition will inform a man as to his duty under any perplexing circumstances. It only means that the clue to the meaning of goodness is discovered by the truly moral man through a receptiveness of spirit in which he allows himself to be led, and in which the wider cosmos of which he is a part and which gave him being is allowed to express itself naturally and spontaneously through him. Such a relation between man and the wider purposes of reality requires for its existence many conditions and opportunities and much discipline; but however hard it may be to attain, the highest goodness cannot exist (is my contention)

apart from an intimate acquaintance with that Value which is the spring and source of all values, which gives to everything which is of worth in human life its satisfying qualities.

The view we have been discussing, then, does not allow us to accept the ultimately separable existence of a plurality of particular values. The good life is not a synthesis or even a harmony of ready-made goods. The particular values with which we have contact in practical experience—goodness, beauty, truth, wealth, health, play, etc., are determined and created by the particular concrete conditions of human existence and human minds. The content of beauty, *e.g.*, depends upon physiological conditions, the content of goodness upon instinctive and social factors, and so on. Each value is a concrete manifestation of Value, and, because concrete, each value is different in character from every other. Classifications are useful things, and it is of great use to make lists of values such as economic, bodily, aesthetic, intellectual values, and so on, but in doing so we should not be misled into supposing that two members of the same class are ever precisely similar.[20] Owing to a certain uniformity in the conditions of human life there are certain uniformities between values. Intellectual values can no doubt be defined in certain general terms, otherwise to speak of them would be meaningless; so can economic values, aesthetic values, and the rest. But these values are not ready-made; they come into existence, they become values, only under the stress of particular circumstances.

This individuality of created values which are manifestations of Value is important in spheres such as those of art and morals. Aesthetic values, beauties, are not given things out of which the artist builds his picture. Rather are concrete aesthetic values made in his act of creation. They are made in the concrete stuff of paint, or stone, or clay, or sound, as the case may be, by what is popularly called inspiration, a term which has an illuminating meaning. The artist is, metaphorically speaking, inspired; he takes something into his soul which we call beauty, and which we know is a revelation in a particular form of supreme Value, and by his creative act he manages in some extraordinary way to express in what seem the almost 'impossible' materials of

[20] Except possibly moneys at the same exchange-value.

horsehair, catgut, wire, wood, or whatever it be, his joy in the acquaintance with that supreme Value. In doing so he has really made or created a specific value. So in not entirely dissimilar fashion we may be said to create intellectual values when we think. And in the moral life we create goodness as a concrete expression of an experience of Value. It is natural that the logician and classifier as well as the practical man should regard these finite values, once there, as given and ready-made, and that the moralist should tend to accept this, and suppose that the good life is built up out of ready-made values.

It follows from, indeed is included in, all that has been said, that we must reject any kind of view which makes *ultimate* Value reside in the welfare of finite conscious beings. Professor Everett, for example, says, "A point is soon reached beyond which teleological explanation cannot advance in its search for the principle of value, because an ultimate value is found. This ultimate value is the welfare of conscious beings. To ask why men prefer well-being to ill-being has the same meaning as to ask why man's native capacities are what they are. We have to recognise, as ultimate, the fact that we are so constituted as to be susceptible to weal and woe, and to prefer the one to the other." [21] Again, "to perfect our activities is to *humanise* them. This means that the pattern and standard of worth is to be found in man's own nature, not in beings higher or lower than himself. All spiritual aims are human. To pursue the ideal is not to attempt to walk the clouds or to climb the skies, but to seek the completest manhood or womanhood." [22] But the denials implied here are surely false, though the assertions are true enough. Mr. Everett takes it as an *ultimate* fact that we are so constituted as to be susceptible to weal or woe, and argues that we can go no further. But to put it in that way is like saying that a wild rabbit is so constituted that it will always run away from a dog, and that that is the end of the matter. Again, to say that the pattern or standard of worth is to be found in man's own nature and nowhere else, is exactly the same as arguing that the reason why the rabbit runs is because it conforms to its own nature. The proposition is of course true, but it is not an argu-

[21] *Moral Values*, p. 53.
[22] *Ibid.*, p. 166.

ment, and to deny that we can go further is false. If we persist in such an argument, we rob our zoölogy and our ethics alike of much of their meaning. The zoölogist is energetic enough to seek for an explanation of why the dog means woe to the rabbit, and he finds it not in mere rabbit- or dog-nature, but in the whole complex set of conditions to which rabbit and dog have to adapt themselves in the natural state. He finds it in the end in the different relations of these animals to their different environments, governed by the general necessity of each to survive after his own particular fashion. So in morals it is not only not illegitimate to go further and to ask why our idea of welfare should be what it is. It is essential to do so. To do otherwise is to fall into that commonest of logical fallacies in ethics of attempting to explain ethical good in terms of itself, and not in terms of its place and relations, a fallacy which if persisted in in science would have the most disastrous results—if indeed it had any results at all. The pattern and standard of moral worth is not to be found in man's own nature alone, but in his environment, not merely of human society, but of the wider cosmos. It can always of course be argued that a full understanding of the principles of man's own nature is an understanding of the principles of reality, but the continual danger of narrowness and 'stuffiness' in ethical theory makes the reverse method of procedure a more fruitful one on the whole. We are more likely to discover the nature and meaning at once of reality and of man's true good by extensively exploring reality, than by probing within the narrow circle of what we may conceive as 'man's nature.'

There is in the end then only one ultimate intrinsic Value, and that is not any value of finite human life, but the Value revealed in the Universal Life. Therefore it seems, strictly speaking, incorrect to speak of intrinsic 'values' or final 'values' or absolute 'values,' in the plural. But as we do use these terms 'intrinsic' and 'final' quite usefully, it is worth while stopping for a moment to ask why we use them, and what we mean by them, particularly by 'intrinsic.'

That 'intrinsic' in the sense in which we speak of beauty as intrinsic, does *not* mean 'apart from consciousness' we shall

find good reasons for holding. Again, that 'intrinsic' does *not* mean 'non-instrumental' will also be realised at once if we consider how 'intrinsic' values such as goodness and beauty have instrumental value for the whole of the rest of life. We might even go further and say (though it is a more difficult question) that the very intrinsic Value of the world itself is not non-instrumental, serving as it does to sustain and enrich life of finite creatures. There may be mere instrumental worths, but there are no mere intrinsic worths. Are then 'intrinsic' worths simply instrumental ones? That is an extreme position which we could not adopt without strict examination, and when we press it we are bound to reach once again the familiar conclusion that the category of means and ends is not adequate to describe the facts. What then do we mean by the term 'intrinsic'?

When we say that beauty is an end in itself and an intrinsic value we seem to mean not that beauty is a final end of life, but that it is a complete *moment* of experience, and must be pursued entirely for its own sake. It is complete because it reveals the universe perfectly within its own limits. It is a self-contained moment with its own internal coherence. We call goodness and truth in their turn more intrinsic than exercise or pleasures of the sense because they are more comprehensive, and each in itself is a fuller revelation of the Value and meaning of things. Goodness and beauty and truth are called intrinsic, because each reveals in its own way—beauty through a moment, goodness and truth through a moment or a life-time—the one and only Value which is intrinsic. But because they belong to finite life they are partial. They are psychological wholes, but they are not ontologically self-complete. Realisation of goodness or beauty or truth can only reveal one facet of reality at a time, so to speak, though, to push the metaphor a step further, it is the facet of a transparent crystal, and we are able to see through the facet to the centre and to the projections of the other facets. It may be convenient, therefore, to distinguish between 'intrinsic' values which are 'intrinsic' because they reveal the universal Value in a particularly vivid way (*e.g.*, goodness and beauty), and the Absolute Universal Value which is their ground, of which

they are revelations, and which is the only finally intrinsic Value.

Although I have spoken of Absolute Value as single, and denied that it is made up of an aggregate of values, it must be re-emphasised that the complexity of the manifestations of the Absolute Value is not denied. I have emphasised the singleness of the supreme Value, not for the sake of arguing that it is an abstract and blank entity, but in order to show that finite values are finite manifestations of it, and not *vice versa*. If the Absolute were not a life revealing itself in the complex ways and under the particular modes which we know, it could have no meaning for us.

LOUIS ARNAUD REID.

UNIVERSITY COLLEGE.

THE PERSONALISTIC CONCEPTION OF NATURE AS EXPOUNDED IN THE SĀNKHYA PHILOSOPHY.[1]

THE Sānkhya view regarding the personalistic conception of nature may be deduced from its view with respect to the nature of the Absolute Purusa as well as that of evolution. According to the Sānkhya the Absolute Purusa is an all-pervasive Subject and therefore includes Prakriti as an element of His nature. Consequently, whatever is in the latter is pervaded by or included in, the former. Or, in other words, everything in Prakriti is, thus, a subject-object. It is a subject inasmuch as the Absolute Purusa is in it; but the Absolute Purusa is in it, whole and undivided, for He cannot be conceived to be divided into parts, each of which exists in each of the objects that constitute Prakriti, just as our mind cannot be conceived to be divisible into parts which separately exist in our ideas, thoughts, feelings and volitions. In other words, just as the whole mind exists in each of its states from the point of view of that state, so the whole Absolute Purusa exists in each object that He pervades or includes. Thus, everything in Prakriti partakes of the nature of the Absolute Purusa and is perfect; but it is perfect from a particular or limited standpoint; for it is also an object, a particular or limited thing. So that everything in Prakriti is, from its own point of view, a perfect subject-object. This fact becomes more clear if we consider the nature of the evolution of the world. It is a well-known Sānkhya doctrine that everything—every evolute—is a result of the conjunction of Purusa and Prakriti: consequently, in everything both Purusa and Prakriti are present; that is, thus, everything is a self and a not-self—a subject and an object—a Purusa and Prakriti—at the same time. But the subjective side of it is represented by the Absolute Purusa in as far as He is in it: so that it is a perfect subject-object from its own point of view. Thus, being such, it is a person. This is perhaps the grandest and the loftiest of

[1] *Cf.* "The Doctrine of Evolution in the Sānkhya Philosophy" in this REVIEW, Vol. XXXIV, 1, pp. 51–69, by the same author.

all the teachings that we can learn from the Sānkhya. The Sānkhya maintains that the world is a system of spirits and thus preaches Pan-psychism. In this respect, at least, it is in perfect agreement with the Vedānta as interpreted by Rāmānuja and Nimbārka.

But we should consider one difficulty here. The Sānkhya calls the Prakriti and her manifestations unconscious or unintelligent.[2] How can, then, the manifested world be a world of spirits or conscious beings? We must, therefore, carefully examine the sense in which the Sānkhya calls Prakriti and her manifestations unconscious. In this connexion we should read another verse: "Therefore, through union therewith, the insensible products seem intelligent; (and Purusa, though) indifferent appears like an agent, though the activity is of the cosmic factors."[3] Gaudapāda explains it in this way: "Here Purusa (alone) is sentient, (and it is) owing to union therewith that intellect and the other evolutes, invested with an appearance of intelligence, seem sentient. As, in the world a jar through the conjunction of cold feels cold, through that of warmth feels warm, so intellect and the other modes, through conjunction with Purusa, appear as intelligent." Along with these should also be read the following aphorisms: "The evolving power of Prakriti is due to her proximity to Isvara, as in the case of a loadstone."[4] "The evolving power of Antah-karana is due to its being lighted up by Isvara as in the case of the iron."[5] "The agency of Purusa is due to the influence of Prakriti, and the consciousness of Prakriti is due to her proximity to the Purusa."[6]

In the above statement we find two apparently contradictory assertions: on the one hand, it is asserted that Prakriti and her evolutes are unconscious or insentient; on the other, it is asserted that they acquire consciousness or sentience through their conjunction with, or proximity to, Purusa. Are these two assertions reconcilable? We believe they are. Prakriti and her evolutes are called unconscious when thought of as distinct and

[2] *Vide Sāmkhya Kārikā*, verse 11.
[3] *Ibid.*, verse 20.
[4] *Sānkhya Pravachana Sutram*, Chap. I, aph. 96.
[5] *Ibid.*, aph. 99.
[6] *Ibid.*, aph. 164.

abstracted from Purusa; and they are called conscious, when thought of as identical and conjoined with him. Some say that they appear or seem to be conscious, while they really remain unconscious. But this explanation seems to me preposterous. A thing, which is essentially or by its nature, unconscious, cannot even appear to be conscious, for the appearance of a thing as some other thing indicates a capacity of that thing for appearing so—a fact which is inconsistent with its essential nature. Therefore, when it is said that Prakriti and her evolutes appear conscious through their conjunction with Purusa, they must have the capacity for appearing as such: this means that they are not essentially or absolutely unconscious, but appear to be so when thought distinct and abstracted from Purusa.

Gaudapāda gives practically the same explanation. He holds: "As a jar through the conjunction of cold feels cold, through that of warmth feels warm, so intellect and the other modes, through conjunction with Purusa, appear as intelligent." Though he uses the phrase "appear to be conscious," yet his analogy clearly indicates that Prakriti and her evolutes become conscious through their union with Purusa, just as a jar becomes, not merely appears, cold or warm, when in contact with a cold or a warm object. Here the essential point of the analogy should be carefully noticed. The fact that a jar becomes cold or warm when in contact with a cold or a warm object shows that it has a capacity for becoming so, *i.e.*, it is its essential nature to be affected by coldness or warmth of an object, otherwise it would remain quite unaffected by them both. Similarly, if Prakriti and her evolutes were really and essentially incapable of being conscious, if they were absolutely indifferent to consciousness, if they were merely unconscious, the union between them and Purusa could not, in the least, make them even appear to be conscious. No particular instance can be adduced that would prove that a thing which does not really and essentially possess an attribute, can even appear to possess it by virtue of its union with, or proximity to, another thing which possesses that attribute. In the *Sānkhya Pravachana Sutram* some illustrations are given which, at first sight, seem to prove that a thing may come to possess an attribute which it really does not possess by virtue

of its proximity to another thing which possesses that attribute: *e.g.*, an iron may possess the power of burning or heating, or of attracting, by virtue of its proximity to fire, or to a loadstone, which power it does not really and essentially possess. But the instance proves rather the opposite truth. It proves that iron has the capacity for, or the attribute of, so doing, which reveals itself when it is placed near, or in contact with, fire or a loadstone, otherwise it could not show such a power even when placed near, or in contact with, a stone or any other thing. But the fact that it does not do so, clearly shows that it does not accidentally come to possess that power, but possesses it really and essentially under the condition that it can operate only when placed near or in contact with fire or a loadstone. It is a well-known fact that all things reveal their powers or attributes under definite conditions: fire burns only when in contact with a combustible thing; a loadstone attracts only when put sufficiently near a piece of iron; a man can see an object only when it is in a position to excite his visual organ. Similarly, an iron can burn, heat or attract, only when placed near or in contact with fire or a loadstone. Take another example. A rope appears to be a snake in the dark; and it may be said that this is an appropriate instance to show that a thing may appear to possess a power which it really and essentially does not; but it is not so. The rope which appears to be a snake in the dark, has a capacity or power to appear as such, and such a capacity or power is not merely accidental, but inherent in its nature; for, otherwise, it could appear to be a quite different thing, such as a log, or a tree, or a block of stone, etc. The fact that it appears to be a snake indicates that there are some important points of resemblance between itself and a snake which do not fail to be perceived in the dark, while its points of difference from the snake fail to do so. This is the real reason why it is mistaken for a snake. It may be said that its confusion with a snake is due to the misinterpretation of the sensations excited by it in the mind of an observer, not to its possessing a capacity for appearing as such; but our reply will be that such a misinterpretation is possible because the rope is capable of producing those sensations which only a snake can produce. Thus its capability or power is inherent in its nature,

not a merely accidental or adventitious acquisition. Therefore, the fact that Prakriti and her evolutes appear conscious or sentient by virtue of their conjunction with, or proximity to, Purusa clearly proves that they possess the capacity or power of being so; that is to say, they are conscious. This conclusion is further confirmed by the fact that if Purusa and Prakriti were absolutely opposite to each other—if there were no tendency inherent in their nature to be conjoined with each other, they could not be conjoined at all—they would remain as apart from each other as the two poles of the earth. But the Sānkhya tells us that they are eternally conjoined—that their conjunction is the cause of the evolution of the world. These two facts,—namely, (*a*) that Prakriti and her evolutes appear conscious by reason of their conjunction with Purusa, and (*b*) that such conjunction being eternal, they eternally appear conscious—conclusively prove that consciousness is an essential attribute of them, in as much as they never part with it, they possess it eternally.

But yet another difficulty remains to be explained. If Prakriti and her evolutes are really conscious, why does the Sānkhya, then, call them unconscious? I have offered one reason above: they are called unconscious, when thought of as distinct and abstracted from Purusa. For they are conscious in as far as they are conjoined with him; but in as far as they are thought of as distinct and abstracted from him, they must be unconscious; for if, still, they are conscious, no meaning is left in the fact that they are conscious in as far as they are conjoined with Purusa. Or, in other words, they are conscious because they are differentiations, modes, or moments of Purusa—because Purusa exists, works, realises himself in and through them—because Purusa is their very being or life-principle. And if that Purusa, that life-principle, is abstracted from them, or they are abstracted from him, nothing remains of them that may be called conscious; they become unconscious.

There is another reason for calling them unconscious. It is necessary to understand the meaning of unconsciousness if we want to understand the meaning in which Prakriti and her evolutes are called unconscious. Unconsciousness may be used

to mean the total absence of consciousness; or it may be used to mean a very low degree of consciousness—consciousness whose intensity or degree falls below the threshold or the level of distinct and vivid consciousness. In the former sense, unconsciousness is absolutely opposite to consciousness, whereas in the latter sense, it is a kind of consciousness and is called, in modern psychology, subconsciousness. But can we conceive of an absolutely unconscious thing? How do we know that a thing is absolutely unconscious? We can know a thing to be absolutely unconscious only by relating it to our thought or consciousness. But how can we relate a thing which is absolutely unconscious to a thing which is conscious? How can we relate what is absolutely unconscious with our thought or consciousness? Is that not impossible? Two things, which are absolutely opposite, cannot be related, for relation implies affinity of nature, some characteristics in which they agree; and two things, which have nothing in common, must fall absolutely asunder and cannot be related. Thus there cannot be anything absolutely unconscious; and even if there were such a thing we could not know it, could not think about it, could not make any assertion whatever about it, *i.e.*, could not say whether it existed or not. We must therefore reject the first meaning of unconsciousness (as it has been rejected by modern psychology), and accept its second meaning. When, therefore, the Sānkhya calls Prakriti and her evolutes unconscious, what it means to say is, that they are subconscious; that is, their consciousness has a low degree of intensity—intensity which is not sufficiently high to make consciousness distinct and vivid.

Now subconsciousness also admits of degrees: thus one thing may be more or less subconscious than another, that is, may possess lower or greater degree of subconsciousness than another. Thus, the five subtle and the five gross elements, for instance, are more subconscious, *i.e.*, possess lower degrees of consciousness than the eleven senses, which, again, are more subconscious than the self-consciousness (*Ahamkāra*), and so on. Even the objects composed of the five gross elements do not possess subconsciousness in equal degrees. This fact may be made more clear if we consider our own subconscious ideas. Those of our ideas which

are, at any particular time, subconscious, *i.e.*, below the level of distinct and vivid consciousness, or in other words, of which we are not, at present, distinctly and vividly conscious, do not possess subconsciousness in the same sense and in the same degree. Some of them are just below the level, so that they can be raised to the level of distinct and vivid consciousness by a very slight effort of will, or by a very slight suggestion from outside, while some others require greater effort of will, or more powerful external suggestion; some others, still, require far greater effort or far more powerful suggestion; some, again, cannot be revived even after continuous effort or suggestion; while some others seem to be lost for ever. These different classes of ideas may be regarded as possessing subconsciousness in different degrees and may be called more or less subconscious. The evolutes of Prakriti may be called more or less subconscious in this sense. But the liminal intensity or threshold of consciousness may be lowered by proper practices to such an extent that what is subconscious in normal circumstances may be made conscious, or that what remains imperceivable in normal circumstances may be made perceivable: and in this way the liminal intensity may be so lowered that only very few ideas remain subconscious. In the *Yoga Sutram* it is said that *yogins* may attain powers by virtue of which they may perceive or be conscious of things which remain unperceived by ordinary men, or be conscious of ideas which remain subconscious to the latter. And we conceive of a conscious Being in whom such a liminal intensity or threshold is so extremely low that it has altogether disappeared, so that in Him there is no idea or state which is subconscious, to Him there is nothing which is not consciously present. Such a Being is the Absolute Purusa. The lives of all other beings are divided into two spheres—the subconscious and the conscious—with different extents and boundaries.

From the above it is manifest that the limits of both consciousness and subconsciousness are fluctuating, and that a being may be called both subconscious and conscious from different points of view. Thus, a being may be called subconscious, *i.e.*, possessing lower degree of consciousness, in comparison with a being possessing higher kind of consciousness;

and the same being may be called conscious in comparison with a being possessing still lower degree of consciousness, or more subconsciousness. In this sense, a lower animal may be called subconscious in comparison with a man and conscious in comparison with a plant. Similarly, Prakriti and her evolutes are called by the Sānkhya unconscious (*i.e.*, subconscious) in comparison with Purusa who possesses the highest degree of consciousness, and are also said to appear conscious, not, of course, in comparison with anything else, because there is nothing else than Purusa to be compared with, but because their subconsciousness is a kind of consciousness. Or, in other words, though they are unconscious in comparison with Purusa, yet, they may, to all intents and purposes, be regarded as conscious; that is, they are conscious from their own points of view. Just as we are conscious from our own point of view, but subconscious from the point of view of the Absolute, so the physical things are conscious from their own point of view but are subconscious from our point of view. The reasons for such a double point of view from which we view the nature of Prakriti and her evolutes, is that the latter do not reveal their consciousness in the same way as we do. The manifestations of their consciousness being quite different from, or in numerous instances diametrically opposite to, those of ours, we label them with the name of unconscious; but really, they are conscious in their own ways and from their own point of view, as we are in our own ways and from our own point of view. We may therefore conclude that there is no inconsistency in affirming that Prakriti and her evolutes are both conscious and unconscious (*i.e.*, subconscious), if we understand the proper meaning of the assertion.

There are aphorisms in the *Yoga Sutram* to support my contention that Prakriti (of which Buddhi and Chitta are only evolutes) is not absolutely unconscious. In aphorism 20 of the *Sādhanā Pāda* it is expressly stated that Purusa sees the functions or modifications of Buddhi (*i.e.*, Intellect) as if they were his own. And Vyasa in his commentary upon this remarks that Purusa is not very dissimilar to the Buddhi; for, he appears to be the very self of the Buddhi on account of his experiencing its functions or modifications as if they were his own. Now, it is

here asserted that the ground for the similarity between Purusa and the Buddhi is the capability of the former for experiencing the functions or modifications of the latter as if they were his own, and for appearing, thereby, to be the very self of it. We have already proved that when one thing appears to be another, it possesses the capacity or power for appearing as such, that is, it is the nature of the thing to appear as such. If it were not the nature of Purusa to appear to be the very self of Buddhi, if it did not contain the capacity or power to appear as such, he could not do so: but the fact that he really does so, proves that he really possesses such a capacity or power. He is, no doubt, also distinct from Buddhi; but that does not debar him from identifying himself with it in certain respects. There are no things in the world which are absolutely similar or dissimilar: all things are partially similar and partially dissimilar: we call things similar or dissimilar when the points of their dissimilarity or of their similarity are few and unimportant (at least for a certain purpose). Similarly, Purusa and Buddhi are dissimilar in certain respects and similar in certain other respects. Of course one of the points of their dissimilarity is stated to be that Purusa is conscious and Buddhi is unconscious. And the reason stated for such dissimilarity is that the latter, possessing the three *gunas*, must be unconscious, whereas Purusa, who is merely the seer of them, is untouched by them, and is, therefore, conscious. But I am unable to follow the argument: it is true that Buddhi possesses the three *gunas*, but that is no reason for its being unconscious, if by unconsciousness is meant the total absence of consciousness. We have already proved that there is nothing in Prakriti which is not pervaded and enlivened by the Conscious Purusa, and therefore, not conscious. In fact, here unconsciousness must mean subconsciousness, which is the popular or ordinary sense of the term, as I have said before. And it is no reason to argue that Purusa is conscious, because he is unconnected with the *gunas*, being a mere seer of them. Being all-pervading, he is present in them, though distinct from them. Again, he is the seer and they are the objects seen, and this relation of subject and object being *eternal*, neither of them can exist apart from the other—the very life of the one is in-

separably bound up with that of the other. And what I contend here is confirmed by aphorism 4 of *Samādhi Pāda*, read with Vyasa's comments on it. Here it is very clearly stated that an identification takes place between the manifestations of Purusa and the modifications of Buddhi in the state of the latter's external activity. Again, Buddhi is likened to a magnet. The essential point of the analogy, if there is any, is that as a magnet impregnates a piece of iron with its attractive power, so Buddhi impregnates Purusa with its own power of modifications and functions so thoroughly that the latter comes to think them as if they were his own. How are all these possible, if Purusa and Buddhi were really absolutely distinct from each other? The truth is, they are not really absolutely distinct, but partly also identical. For Purusa, being all-pervading, includes Buddhi as an element of his nature, though at the same time, also distinct from it, as the whole is distinct from its constituent elements. The same conclusion follows from aphorism 22 of the *Kaivalya Pāda*. In his commentary Vyasa quotes a significant passage which most distinctly asserts that Buddhi is the real cave where the Eternal Brahma (Purusa) is hidden. If the Eternal Brahma or Purusa is really hidden in Buddhi, how can they be absolutely distinct? Can one thing be hidden (*i.e.*, present in a concealed form) in another, if they are absolutely distinct or opposite in nature? The truth is, Purusa includes Buddhi within his nature and is eternally present there, although his presence remains concealed from the view of ordinary people.

The same thing is asserted in aphorism 23 of the *Kaivalya Pāda* in a still more emphatic way. Here it is clearly affirmed that Buddhi assumes the forms of both the subject and the object—both the conscious and the unconscious. It becomes conscious by reason of its receiving the reflexion of the Conscious Principle (Purusa), just as a crystal vase becomes red when it receives the reflexion of a china rose. The analogy clearly shows that like a crystal vase, Buddhi is not wholly indifferent to such reflexion; that is to say, it is its inherent nature to receive the reflexion—it possesses the capacity or power for the reception of the reflexion. This shows that it is not absolutely unconscious; if it were really so, it could not even appear to be

or assume the form of the conscious. It is true that Buddhi is not itself the Conscious Purusa, as some people erroneously suppose, but, still, it is the conscious instrument or vehicle in and through which Purusa works and manifests Himself.

According to the Sānkhya, then, everything that is real and a real constituent of the world is a unique centre in and through which the Absolute Self-conscious Spirit realises itself in a unique manner and returns upon itself as a fully-realised Being. In this sense, everything partakes of the nature of the Absolute, and is, therefore, a perfect subject-object from its own point of view. But everything is not perfect from the beginning; it is actually imperfect, but potentially perfect, that is, capable of attaining perfection by gradual evolution. Consequently, everything, except the Absolute, is a subject-object possessing different degrees of the unity of self-consciousness. Thus we get three forms of personality: the Absolute is Super-person; the human beings are persons, and the other forms of being may be called, *en bloc*, sub-human persons, understanding by the last persons who possess more imperfect forms of self-consciousness. The Sānkhya therefore preaches pan-psychism or a personalistic conception of nature, the world being a system of spirits.

A. K. MAJUMDAR.

CALCUTTA.

REVIEWS OF BOOKS.

Experience and Nature. By JOHN DEWEY. Chicago, Open Court Publishing Company, 1925.—pp. xi, 443.

The charm of Professor Dewey's writing is that the geniality of his own personality continually breaks through his literary expression. His book indeed is a delight to read. We can understand, however, the philosophical student experiencing some disappointment, occasionally perhaps even exasperation, at the elusiveness of the author. There is no lack of definite doctrine or clear direction in this book and yet the particular theory which Professor Dewey holds and which he names instrumentalism, a theory which appears at one time as a form of radical empiricism, at another as a form of pragmatism, never comes out into the open. It darts about weasel-like, to adopt a simile introduced by Professor Dewey into his opening sentence. It peeps out at us for a moment, to disappear immediately and almost before we are aware of it, behind expositions and criticisms and comparisons of general standpoints. Moreover the book is not one that he who runs may read, the style is never lucid like Hume's or technical like Kant's, and the meaning is often obscure. Indeed we have often found it necessary to read a sentence at least three times, once to see what it says, again to know what it means, and yet again to decide the importance attached to the meaning. There is purpose in these remarks. We cannot help feeling that Professor Dewey's doctrine draws much of its fascination from its being kept in the background. "We do it wrong being so majestical to offer it the show of violence." Indeed like the apparition of whom these words were spoken Professor Dewey's theory does appear as something posed between the materialism of an external reality and the spiritualism of an internal activity without obvious support from either. The shadow of realism and the spectre of idealism seem to haunt his efforts to place his instrumentalism on a self-supporting basis.

A scientific flavor pervades Professor Dewey's philosophizing due perhaps to the conscious or unconscious influence of the honoured name whose memory is preserved in the lectureship, but the scientific aspect of his own doctrine is never emphasized. Professor Dewey seems more concerned to point comparisons and to indicate contrasts between the view-point of the older philosophies and that of our

modern world.) In this also we experience some disappointment for he seems often to stress trivialities. We have no doubt, for example, that there are still earnest searchers for truth who are worried with the dialectical difficulties discussed in the first chapter,—whether let us say the word 'experience' applied to our knowledge of the flower in the crannied wall should be confined to the actual sense impression and so be without content and denote nothing, or whether it should include all that is implied in that simple existence, in fact denote everything,—but we must admit that we have little sympathy with them in their difficulties and considerable impatience with their logomachies. For in philosophy today we have before us an urgent and strenuous task. We cannot be idlers lounging in the market-place, nor dreamers spinning the cobwebs of our speculative systems in the aloofness of our studies, we are called on to assist humanity in an intellectual effort of the first magnitude, in its endeavour to adapt its mind to a new outlook on the universe. We of the present generation find ourselves in the midst of one of those crises in the history of thought which from time to time have filled humanity with amazement, disturbing its habits, falsifying and rendering useless all the ideas with which it had accustomed itself to coördinate its practical, scientific, social, political and religious interests. Never since man had to meet the paradox of the antipodes has so complete a revolution in his scientific notion of the nature of the physical world presented itself as that which now arises before him in the principle of relativity. Never before in history has so fundamental a reformation of his ethical and religious ideas been forced upon him as that which the acceptance of the evolution hypothesis entails. The day is gone by when philosophers could dissociate themselves from the men of science and leave it to the mathematicians and physicists to settle among themselves what are to be the fundamental concepts and the working hypotheses in physical science.

Let us turn however from the general reflection which the book as a whole suggests to us and consider the main theme and special subject-matter of the work. (The most valuable part and that which most clearly illustrates the instrumentalist theory is without doubt the exposition of Professor Dewey's philosophy of language. It is not a scientific theory of the origin of speech but a philosophy of the nature and import of intersubjective intercourse. This we may say is the central theme of the book. Stated briefly the doctrine is that knowledge is a tool and that language is the tool of tools. It is man's acquirement of the faculty of speech, and the means of intercourse

which this has put into his possession, which marks the height of his evolutionary attainment, constitutes his superiority in the hierarchy of the living and enables him to establish his domination. All this achievement of man may be traced to his possession of a tool,—*logos*, the word,—a tool for giving tools. The means by which this end is accomplished is the device of attaching meanings to detachable signs. The essence of the tool is detachment, and that a detached sign may signify, may possess meaning, it must have meanings attached to it. Language makes this possible. This we take to be Professor Dewey's theory. It is by their meanings that words become language, before this they are mere sounds or noise, but by the attachment to them of meanings they become words, serve for intercourse and transform man from an instinctive to a rational creature. The theory is forcibly and very ably argued, and yet no sooner is it propounded and well under way than it makes shipwreck on the rock of realism. Such at least appears to us its disastrous issue. For no sooner has he shown us that words without meanings are not words, and that meanings unexpressed are not meanings, than he turns aside to discuss the meaningless question what are words when they are without meaning and therefore not words, and he strives vainly to give an intelligible answer. That we may not be suspected of misrepresentation, we will refer the reader to the argument, too long to quote, on page one hundred ninety-six, following the illustration of the whistle used in the regulation of traffic. The argument is that the physical fact, the sound of the whistle, is something in its own right entitling it absolutely to be described as the sound of the whistle, even if abstraction be made of police officer, traffic and traffic regulation. If this is not a *reductio ad absurdum*, it is at least a gratuitous introduction of a surd into the equation. No idealist need deny the brute nature of the sign as a limiting concept but this is quite irrelevant to the philosophy of language, and to introduce it as a factor is simply to change the whole ground. It is in effect to abandon the ideal of a philosophy of expression and intercourse and propound a genetic hypothesis of the origin of language challenging comparison with the now discredited 'bow-wow' and 'ding-dong' theories. Professor Dewey disappoints us.

Closely connected with his doctrine of language is his peculiarly emphatic insistence in rejecting the implication so generally accepted in philosophical discourse, that experience in its very nature is owned and "that the ownership is such in kind that everything about experience is affected by a private and exclusive quality" (p. 231).

He declares the implication to be an absurdity. It may be, but is it not, we ask, this "absurd" implication which has proved so stubborn an obstacle in scientific research that mathematicians and physicists have come to the conclusion that the only way is to accept it? Have they not come to terms with it in formulating the principle of relativity? However indifferent to the work of the scientific laboratory philosophy may feign to be and however philosophers may be drawn to soar in the empyrean, there is no way of disavowing responsibility here. Science accepted from philosophy its conceptual space-time framework of the universe and treated it as reality. The familiar Newtonian metaphysics has proved unworkable and the idea of nature as an absolute system of reference has failed. Modern physics has discovered that the universe is not disclosed or revealed to the observer of physical phenomena, it is an extrapolation. It is this which gives its paramount importance to the philosophy of language. The common world is a function of intersubjective intercourse and not as hitherto assumed its *a priori* condition. Each of us views the world from an individual standpoint and we can no other, and the mathematicians are proving the possibility of accepting the fact of universal relativity and yet securing an objective basis for physical science. Without language not only could there be no idea of an external world but there would be no external world.

Many will turn with special interest to Professor Dewey's presentation of the emergent theory of life and mind to which he signifies his adherence (p. 271). He forestalls the criticism of that theory based on the fact that emergence is merely a descriptive term and is neutral as to nature and origin. It is he thinks this neutral standpoint which makes it attractive and gives it scientific value in enabling us to approach the philosophic problem without bias or prejudice. This misses, however, so at least it seems to us, the real criticism of the emergent theory. The objection to it is not that it is mere description but that it is false description. If emergence means no more than that life, and later mind, appear at a definite period of the history of this planet, then it is little more than the expression of a belief that the planet has a history. It certainly seems to imply more than this in the philosophers who undertake to expound it, for they maintain that life and mind are definite planes or levels in a cosmic evolution. If this is the implication then the theory is false even as description. Life is not a phenomenon of cosmic evolution at all, it is a phenomenon wholly connected with solar radiation. There is not the slightest scientific reason for supposing, or evidence for believing, that the

complexity of atomic structure, or of molecular arrangement, which is what we usually refer to when we speak of cosmic evolution, took on new qualities at a definite level or stage and that life and mind are such levels. At a certain period in the history of this planet there appears the form of activity we name life, it is apparently single in origin and one in its manifestation and its work consists in intercepting, redistributing and generally controlling and directing the radiating energy of the sun which is temporarily arrested on the earth's surface. To describe such a phenomenon as emergent is false and misleading. So also it could be shown that to describe mind as an emergent plane or level of biological evolution is equally misleading. Mind, at least in the intellectual form it assumes in man, is not a new level or plane in the evolution of structural forms, but the appearance of an activity which freeing the animal from its dependence on natural conditions enables it to create the conditions and take its destiny into its own hands. It is a unique phenomenon and to describe it as emergent is to darken council and misinterpret fact.

In criticizing these particular points in Professor Dewey's most interesting book our intention is not to depreciate it, certainly not to cast any slight on its teaching. In reading his book we have felt like accompanying a friend in his task of philosophizing. The journey may seem to start from nowhere and to reach no haven but we enjoy the sound reflection and intellectual stimulation as he discourses with us by the way.

H. WILDON CARR.

UNIVERSITY OF SOUTHERN CALIFORNIA.

La théorie de l'intelligence chez Schopenhauer. Par PHILIPPE MÉDITCH. Paris, Félix Alcan, 1923.—pp. 363.

In the history of philosophy M. Méditch distinguishes two conceptions of the intellect: as reflecting nature and as constructive in nature. The first conception prevailed prior to Kant; for the second, Kant is mainly responsible. Schopenhauer begins by continuing the Kantian analysis of the constructive intellect. As is brought out in the first chapter of this book, dealing with Schopenhauer's doctoral dissertation, Schopenhauer transforms Kant's transcendental idealism into an illusionist idealism: Kant's *Erscheinung* becomes pure *Schein*. Ultimate reality transcends intelligence; it is will. The world is my idea; but my idea, my intellect itself is after all but a function of the world, or rather of the brain. All knowledge whatever is always in relation to the will. Schopenhauer, the successor of Kant, is also the predecessor of William James. There is in Schopenhauer like-

wise a third theory of intelligence, as reflective. In art, in morals, the intellect may renounce world-forming, may check and end its will-driven pragmatic course, and may become disinterested contemplation, a pure mirror reflecting eternal reality, may curb and deny the will and sink into quietude. These three conceptions of intelligence, as constructive, as pragmatic, and as reflective, are to be clearly distinguished in Schopenhauer's philosophy. M. Méditch's whole book is a thesis looking forward to this conclusion (p. 11).

The detailed interpretation of Schopenhauer is governed by this initial conception. Thus Schopenhauer's æsthetics is viewed as a grafting of Kant's notion of intelligence on a Platonic theory of reality (p. 234). The first problem confronting the student of human conduct is the problem of freedom: is the intellect but a spectator of conduct which from first to last is will-driven; or can the intellect really modify the course of our lives? If the former, then the sense of duty is an illusion; if the latter, then indeed there is a practical judgment of Ought. Schopenhauer's *Operari sequitur esse* means that man is not responsible for what he does but for what he is, for his intelligible, not for his empirical character. But the notion of individual responsibility involves Schopenhauer in difficulties.

Intelligence is the condition and the path of our woe; it is also the formal condition of egoism. But through intelligence again, through insight into the nature of the will, man is led to a struggle with his will-driven character and to a final denial of the will-to-live, to a Nothing which is the consummation of the moral life.

Throughout this exposition of Schopenhauer's theory, the author brings out the double nature of intelligence, individual and universal, in relation to the individual and the universal will. At the conclusion of his book he raises several problems over which there has been considerable controversy: the universal intellect as emancipated from the principles of reason and individuation; the universal intellect as the determinant of pity; the universal intellect as the denier of the will. M. Méditch defends Schopenhauer against the charge of self-contradiction. With regard to the first of these problems, he interprets Schopenhauer as saying that knowledge emancipated from the principle of sufficient reason is not knowledge in the strict sense of the term. Hence the intuitive knowledge proceeding from universal intelligence, which engenders art and morality, can only be a mystical vision beyond the comprehension of the individual intellect. It transcends sense and understanding. The only thing a prudent immanent critic can do in the face of this doctrine is to abstain from all appreciation! (p. 335).

With regard to the second problem also M. Méditch defends Schopenhauer: only if we treat Schopenhauer's system as finalist can we find ground for objecting to the ethics of pity as at variance with the negation of life. And, touching the third problem, the denial of the will by the universal intellect has given rise to much controversy and criticism. If the will-to-live is one and indivisible, is it not negated altogether whenever any one ascetic completely curbs it in himself? If the will is essentially unalterable and indestructible, how can intuitive knowledge ever curb or negate it? If the intellect is servant, and the will is master, how can the former overthrow the latter? These and other objections are, according to M. Méditch, due to an inadequate understanding of Schopenhauer, to the inability of the conceptual intellect to penetrate the point of view of universal intelligence. The author quotes with approval Schopenhauer's words, that it is waste of time to look for contradictions in his philosophy.

The system of Schopenhauer, we are told, rests ultimately not on reason and necessity but on free irrationality. Schopenhauer's doctrine of universal intelligence is a vision of genius out of all relation to rational knowledge; the law of contradiction does not touch it. This purely subjective doctrine reveals the depth of Schopenhauer's genius and his passion for the world as a whole (p. 348); while his theory of the individual intellect, on the other hand, subject to the demands of life, anticipates the voluntaristic, pragmatic thought of the school represented by William James.

The best criticism of M. Méditch's final conclusions is contained in the extensive quotations from his predecessors, with which he has boldly contrasted his own text. In his interpretation of Schopenhauer's philosophy he has somewhat neglected Schopenhauer's *estimate* of the world as will and idea. A world which is essentially and hopelessly blind, blundering, craving will may deserve Schopenhauer's pessimistic estimate of it. But a world which is a will that admits of being understood, disinterestedly contemplated, curbed and negated by artist, ascetic, and saint is a world of which the last word has not been said in Schopenhauer's pessimism. There are two moments in Schopenhauer: a will-pessimism and a doctrine of salvation. Of the two, the latter involves not the less but the more profound and ultimate insight into reality. We do not have to run away from our problem and abstain from all appreciation, or say that the universal intelligence is past understanding. Rather should we find in these two moments of Schopenhauer's philosophy the inconsistency which

in a way does credit to him. He saw deeply and clearly into nature and life, and his insight transgressed the frames of his systematic formula. His own doctrine of salvation, through art and morality, is the key to unlock the dungeon of his pessimism.

M. Méditch has based himself on Grisebach's edition, satisfying himself with what is now second best. It is difficult to account for his failure to use Paul Deussen's great definitive edition and the new material contained in some of its volumes. Of the French and the German literature on Schopenhauer he has made good use, but is apparently unaware of anything in English or Italian. The proof-reading of the book is careless, particularly in the German quotations and in the citing of names. There is an irritating lack of uniformity in the bibliographic references that will puzzle the reader who is unacquainted with all the Schopenhauer literature and yet may want to make serious use of this work.

RADOSLAV A. TSANOFF.

THE RICE INSTITUTE.

Hermann Cohen: Eine Einführung in sein Werk. Von WALTER KINKEL. Stuttgart, Strecker and Schröder, 1925.—pp. 356.

The style of Hermann Cohen's works is a reflection of the aggressive and militant personality of their author. It is often comparable to that of Carlyle in its glittering rhetoric and passion and it is not infrequently abrupt and oracular. On the other hand, it often brings profound insights to concentrated expression and the numerous historical references sometimes shed a brilliant light on the continuity of human thought and civilization. The difficulty of Cohen's exposition is ample warrant for Professor Kinkel's excellent little book, which includes a short biography based on personal acquaintance, a brief account of the famous trilogy of works on Kant and a fairly full synopsis of the system of philosophy in its main branches, viz, the logic of pure knowledge, the ethics of pure will, the æsthetics of pure feeling and the philosophy of religion.

Hermann Cohen was instructed at an early age in the documents of the Jewish religion. His higher education was commenced in the Jewish theological seminary at Breslau and throughout his long career numerous articles evidenced his attachment to the Jewish religion. His last book, *Die Religion der Vernunft aus den Quellen des Judenthums*, published posthumously, endeavors to find in Judaism a pure expression of an ethical religion, founded especially on the doctrines of the uniqueness of God and the Messianic hope, which

Cohen connected with the ideal of a new social order. His Judaism was in fact essential to his outlook, although the logical center of his thought was in the rationalism and idealism of Kant.

The great achievement of Cohen appears to have been the freeing of the Kantian idealism from its rigid and scholastic form and its transformation into a philosophy of civilization. (*Cf.* philosophy as "die Lehre von den Grundlagen des Kulturbewusstseins der Menschheit," p. 96.) The system of Cohen is thus comparable to that of Hegel in that the foundation is, in both cases, *history*. While Hegel, however, finds the central thread of development in religion and speculative theology, Cohen finds it in the evolution of exact science, ethical ideals and æsthetic forms. In both cases also there is a reliance on the power of pure thought, but while the Hegelian dialectic was a construction of the world by means of the resolution of contradictions, the "pure thought" of Cohen manifested itself above all in mathematics. Cohen's theoretical idealism, which he regarded as the essential teaching of both Plato and Kant, was compatible with an intense enthusiasm for the mathematical sciences, while, on the practical side, his idealism became an ethical socialism.

Kinkel is a devoted disciple of Cohen and gives us for the most part merely a condensed and fairly clear summary of the system, employing largely Cohen's own language. The *Logik der reinen Erkenntnis* is the corner-stone of the system. Logic is to be *Logik des Ursprungs* and the concept of the "source" is of central significance. It is the function of thought to "beget" or "generate" the objective world and it does this, logically, by going back to the sources of things. Our thought can understand only what it has logically generated or deduced from its source and Cohen finds the source of physical reality in the concept of the infinitesimal. Science must construct physical reality from the infinitesimal as a starting point. In particular Cohen emphasizes the doctrine that thought can accept nothing as real save what it has itself engendered or produced. This constitutes Cohen's thorough-going rationalism and is an expression of his belief in pure mathematics as the foundation of all true science. It is not, however, to be compared with the rationalistic ideal of Wolff, for example. The emphasis on the use of *hypothesis*, which Cohen identifies with the Idea of Plato, as the method of science, brings out the creativity of thought, which forces it beyond rigid formulations. The main body of Cohen's *Logik* is a system of categories and types of judgment, in which the general connection established by Kant between categories and judgmental types is maintained. It is under-

stood in such a way, however, that the one-to-one correlation between categories and judgments is abandoned and it is recognized that one category may be expressed in many types of judgment and *vice versa*. The four heads of Quality, Quantity, Relation and Modality are retained by Cohen but are connected with judgments of formal logic, of pure mathematics, of natural science, and of scientific method respectively. The great difference between Kant and Cohen here is that whereas Kant at least seemed to himself to be deriving his table of categories by pure deduction, Cohen's system is consciously based upon a wealth of material drawn from the history of science.

The *Ethik des reinen Willens* is also characterized by a broad cultural foundation. While Kant had left the categorical imperative for the most part in its abstract purity, Cohen seeks a concrete basis for ethics in *Rechtswissenschaft* as the "*Mathematik der Geisteswissenschaften*." Ethics must become the logic of jurisprudence and politics. For Cohen as for Kant the foundation of ethics is freedom, which is an Idea but is none the less real for that. Freedom is the property of pure will, which combines *thought*, on the one side, with *feeling*, on the other. It is thought which supplies the *motive* of action, while feeling is the *motor*. Pure will is not directed on pleasure and Cohen endorses Kant's rejection of Hedonism and Eudæmonism; the pure will is rather directed on the production of the ethical self, which can only exist in connection with the *state* and with a reference to *humanity*. The ideal dictated by the ethics of the pure will is a League of Nations of Humanity (*Staatenbund der Menschheit*) and socialism. With regard to the latter, Cohen was concerned to show the falsity or one-sidedness of the materialistic interpretation of history of Marx and to urge that the true ethical foundations of socialism were laid by Kant in his various formulations of the categorical imperative. Without reference to the special problem of socialism, Cohen seems to have been one of the very few recognized philosophers of imperial Germany who had any real sympathy with the principles of radical democracy.

Ethics essentially includes religion for Cohen, although, as Kinkel points out, there was a tendency in his last years, to grant a relative independence to religion as a separate branch of experience. The idea of God is, as for Kant, an ethical presupposition and expresses an indispensable faith in a correspondence between nature and morality, which guarantees the permanence of the ethical community. The oneness of God as the symbol of the unity of humanity and the Messianic hope constitute the specific content of the religion of reason.

Cohen does not regard the religion of Judaism as the only possible religion of reason; its superiority consists in its *Ursprünglichkeit* or originality.

The *Aesthetik des reinen Gefühls*, like the other branches of Cohen's philosophy, rests on a broad foundation of historical knowledge as well as keen first-hand personal experience. Æsthetics is founded by Cohen in pure feeling as an accompaniment of motion and thought. This feeling is identified with the pure love of man. Like Plato, Cohen founds his æsthetics on the concept of love and from this starting point analyses the beautiful, the sublime and the humorous as well as the special arts in their classic examples. Cohen's idealism led him to appreciate most strongly the classic forms of the art of the Greeks, of the Renaissance and of Shakespeare. These works, he held, manifested most clearly the pure love of man as the dominant principle of art.

Had Kinkel departed more often from the occasionally mystifying language of his master and adopted in general a freer and more critical attitude his service would have been greater. The language of Cohen, brilliant and clear as it often is, can hardly stand as a permanent formulation of the system of philosophy and its problems. What is necessary in the case of Cohen is that the thought be separated from the unique and personal manner in which it was expressed and Kinkel only performs this task in part. Kinkel's book will have served its purpose if it leads other students of philosophy to the task of an independent and critical evaluation of Cohen's system. Meantime, the promised Commentary on the *Logik der reinen Erkenntnis* ought to be an interesting and valuable work.

W. C. Swabey.

New York University.

Consciousness, Life and the Fourth Dimension: A Study in Natural Philosophy. By Richard Ericksen. London, Glydendal., 1923. —pp. xx, 213.

—"A work [the publisher announces] which in many respects breaks new ground." Certain temperaments among the philosophic public would not forgive a reviewer who left them unwarned of a something headlong in the method of this ground-breaking, which leaves the furrows confused. Those who have found the old audacities of a Schelling beyond sympathy could have little patience with a revival of that spirit after a hundred years of maturing caution. But the most conservative may lend themselves to the challenge of a baffling *tale* and find pleasure in divining a highly vague intent.

Now tales telling of a part played by Mind in the forming of worlds are older than the book of Genesis; but the older the tale the less does the Mind invoked have to do with yours or mine. We know how an idealistic *Naturphilosophie* came to change all that: the present "Study" is a cosmology in this later spirit. To a reproducing of its account of "the time-process" as experience and reflection reveal it, no beginning suggests itself more convenient than the end. Here (pp. 212 f.) is to be found a retrospective survey, whose wording if it be obscure is only characteristically so, which explains at once the reviewer's need of bringing historic analogy to the aid of interpretation. The "Study" is equally remarkable for the number of precedents it suggests, and for the few it alludes to.

"It should be evident that a perfectly accidental [*i.e.*, purpose-lacking] and meaningless time-process would be devoid of that substantiality, which is a condition of consistent cognition and work. . . . Meaning or idea is that which gives to a concatenation of motions an enduring unity and simultaneity of presence. In so far, then, as the time-process may be the explication of a meaning or only accidental, it is either a vehicle of substantialization or desubstantialization of a *telos* or an *a-telos*. It may be a means to create a reality animated by an enduring idea or it may be a means to dissolve and disintegrate such a reality. The best designation for these two alternatives involved in the time-process will perhaps be: essentification and nihilification, essentification meaning a substantialization of a spiritual idea (the quantification of a quality) and nihilification the antithesis of that process: the reducing of a more or less substantialized reality to 'nothing' . . ." (p. 212).

But before considering how the terms just proposed apply to the cosmic "time-process," the reader may care to fix his ideas in terms of familiar images. At no expense or risk to the author, let us conjure up out of an Ionian past the vision of "innumerable worlds." Their "coming into being and passing away" may guide our thought to the end (if "essentification" may mean more, it cannot mean less than "coming into being", and so of the rest); but as for what is too naïvely Greek in this classic figure, it can at least point a contrast: Dr. Ericksen is intensely conscious of coming after Kant,—not surprising then if the theater in which his worlds come and go turn out something less objective than the worlds themselves. It is indeed an *a priori* space-time altogether like Kant's; *a room* "the imagination constructs" *to make-room* for infinite "possibilities" (pp. 102–122). Of these possibilities, each actual world (*e.g.*, ours) has a space and time

of its own of a purely empirical nature: thus, *our* space is somewhat Riemannian, its "straightest lines" paths of light-rays, while for its time it depends on a standard clock of its own. In the "empty and infinite" room imagination provides—with "euclidic-space" and "consciousness-time" making its four dimensions—innumerable worlds can find place for their own space, time, and matter. (If any bethink him here of the finite space of Aristotle, the instruments-of-time of Plato, he does but anticipate the unfolding sequel.)

In one such world we find ourselves: it has been described as a "sphere of motion" in which (as did 'Love' and 'Hate' of old) an integrating "force" and a disintegrating "energy" contend, the ultimate triumph of the latter completing that "nihilification" we have just heard described as "a reduction of reality to 'nothing'."

But "nothing" [we revert to the text] "in this connection can only mean that maximum of repulsion, disintegration and kinetic energy, which involves the effacement of every specialized or individualized existence in the world-space."

The "nothing" then, into which our finite "sphere" ultimately resolves, is to be no absolute *nothing*. If the reader is minded to think of Anaximander's *apeiron* as a limiting case of this least-organized state of matter, I know not that he would be far from the author's meaning.

"The energetic processes must in the last resort lead to a maximum of repulsion, by which the finest particles of matter are spread throughout space. That is to say: the energy which by the formation of a world-system was potentialized in matter or form is by these processes once more made kinetic" (p. 184). This state of maximum *disorganization*, the return of a world into the *apeiron*, is for this modern no more than for that ancient thought the end of all things: a world has come to an end, the "formation of worlds" will never (pp. 180–190). But before we come to that part of the story—what of this word "disorganization" which has slipped into our discourse, replacing there without apology our former "disintegration"? This of course is no small difference, that it may be "let slip": in modern history the 'organic' terminology (of Schelling, *e.g.*) was a very war-cry against the 'mechanic' of Cartesian tradition. That our text throughout justifies this substitution—or rather, insists on this supersession—is one of the numberless indications of its post-Kantian habits of thought. But in the specific form given the organic sphere of motion, the author himself calls attention (p. 188) to that classic model at which we passingly hinted: ". . . in [a new] sense the old Greek conception

of the universe as a "*zoön*" (or living being) . . . may be renewed in our time. As Aristotle says: "To be a boundary is a function of the all-embracing, and the circular motion of the latter, which is perfect, comprises the imperfect motions which are limited and therefore must cease. . . ." (Let me interrupt, to suggest that to this point the passage calls for little re-interpretation to render not only the author's but many another's understanding of what the empirical science of our day has brought our space to. For these moderns, as for Aristotle, the extent of the world is finite; only, for the modern the evidence is empirical, not 'deducible' from the very meaning of the *actual;* and then, the modern finite space has learned to be finite *and* endless. In all this our author follows a trend of the day, and if at the outset we had something to say of an infinite space-time, it will be remembered this was a "construction" within which imagination made room for infinite possibilities; among others, for the finite actuality experience shows our world to be. Of all the words so far quoted only "perfect" and "imperfect" call for a re-interpretation—and call in clearer tones as Aristotle proceeds) . . . "[the perfect comprises the imperfect which shall cease]. And as the eternal circular motion has no beginning and no end, but endures throughout an infinite time, so it is in relation to other motions the cause of their beginning on the one hand and their cessation on the other. Heaven and the upper space were by the ancients attributed to the gods, because they were immortal" (*De cælo*).

In view of what has already been pictured of the expected "disorganization" of the whole "organic sphere of motion" (on which our short lives depend, as minor "imperfect motions") some break with the classic model can no longer be avoided; but need the break be complete? The author will not let it be—which however brings us back to the suspended question of the "formation of worlds." The old order changeth; but does it pass completely into a homogeneous infinite something-that-is-just-not-nothing (and which recalled the *apeiron* of antiquity)? I do not so interpret the following:

When the energy potentialized as matter is once more made kinetic "we may imagine that the electrons or finest particles of matter liberated, . . . in the last resort are seized by the 'time-space' of the universe and involved in a cyclic motion representing the periodicity and velocity of real space as well as the utmost degree of material rarity consistent with motion. . . . Thus the maximum of disintegration, repulsion and kinetic energy in the universe is counterbalanced by the cosmic force or life itself using it for the

dynamic definition on curving of the world-space and for the realization of that simultaneous organic presence [characterized in a previous chapter, as the essence of life and consciousness]" (pp. 184 f.).

It was with this passage in mind that in an earlier sentence I was willing to suggest the *apeiron* as a "limiting conception." Here the "disorganization" seems to be represented as approaching but never quite attaining the completeness of absolute death. Nay, I am not certain but that the limit approached is rather to be imagined as playing—outplaying—the part of Aristotle's divine *Nous:* it is at least hard to escape a *coincidentia oppositorum*. In the following paragraph, the "time-space of the universe," which we have just witnessed "seizing" the vague residuum of disorganized matter to involve it in a cyclic motion, seems to take on the being of an older *Anima Mundi:*

"There must, of course, exist in the universe special points of *attractive force*, where the liberated energy is seized and transformed into nebulæ by potentialization. And if we ask for the *inner* reason of this, we must look for it in the psychic sphere of the universe. It is at least reasonable to suppose that the equal uniformity and periodicity which we must attribute to the world-space as an organic *sphairos*, in which the energetic extension and the organic intension (or force) coincide, are the outer expression of a state of harmony on the hidden psychic side of the universe needing no 'descent into matter' or motional differentiation for the realization of its inherent nature, while the psychic state leading to the formation of world-systems may be a state of disharmony, or at least of discrepancy between that which 'is' and that which 'should be,' of such a nature that a special externalization and motional differentiation is needed to the adjustment of it" (p. 185).

The reviewer cannot tell whether this be "reasonable to suppose"; but surely few will find it less reasonable than prior supposings. However that may be, the "Study" will retain for the curious the fascination of a puzzle; one to be solved (as we think) by gathering a wealth of analogies; analogies the reader is permitted to seek and find for himself.

EDGAR A. SINGER, JR.

UNIVERSITY OF PENNSYLVANIA.

NOTICES OF NEW BOOKS.

Toleranz und Offenbarung: eine Untersuchung der Motive und Motivformen der Toleranz im offenbarungsgläubigen Protestantismus, zugleich ein Versuch zur neueren Religion- und Geistesgeschichte. Von JOHANNES KÜHN. Leipzig, Felix Meiner, 1923.—pp. xvi, 473.

This is a tantalizing book. As its title tells us, it is not only an inquiry into the motives of tolerance, but an attempt in religious and intellectual history. Yet its author assures us at once (p. 6) that it is "no history of tolerance." "Such a history," he says, "would have other tasks: it would have to ferret out all the places where a demand for tolerance arose, to follow all the channels through which this took its course, to study all the statesmanly personalities through whom the tolerance was realized, and in so doing must of course attempt to weigh the cultural and political conditions and take account in general of historical contingency." "Toward this," he adds, "the present work will be a contribution in so far as in its study of the beginnings of tolerance it seeks out its foundations in intellectual history; but, on the other hand, it reaches beyond the immediate aims of a history of tolerance into the general history of thought and of religion."

His period is only the sixteenth and seventeenth centuries, and the field of his research he restricts to Protestantism, to "the Protestantism which has some sort of real relation to the religion of revelation"; for "only on such ground," he thinks, "is religious tolerance really a problem." Within this field, he tells us (p. 11), he undertakes "to gather the multiplicity of the motives of tolerance and of their forms of expression into great main groups and to bring these into connection with the most important types of religious attitude in this age." To this undertaking he devotes his opening chapter—his *Grundlinien*. Then, taking up in successive chapters these types one by one as incarnate in an individual or a group of individuals carefully selected as representative, he studies their position toward the problem of tolerance. His first type is the prophetic, and for its representative he takes Luther. His second is the spiritual, as whose varying spokesmen he chooses Schwenckfeld, Roger Williams, the English Baptists and Independents of the seventeenth century, with especial attention to Milton. For his third type he is somewhat at a loss for a name: he has in thought those simple-hearted folk, like the Anabaptists of the German Reformation or the Quakers of the seventeenth century, who would follow the Master exactly by restoring the primitive conditions, and he calls it "*Das Motiv der täuferischen Nachfolge.*" His fourth type is the mystical, and its representatives David Joris and Jacob Boehme. His fifth and last, that of "moral and rational religiosity," is represented by Castellio and Acontius, by the Arminians (Arminius himself,

Grotius, Wtenbogaert) and the English Latitudinarians (Chillingworth, Jeremy Taylor), and by the German Pietist Spener. A final chapter on revelation and tolerance sums up his conclusions.

The author is learned, earnest, fair-minded, acute. He is well schooled not only in history, but in philosophy and theology. His knowledge of the literature of his subject is broad and exact. His book is one which no student of the history of tolerance can neglect. But—how arbitrary is his selection of types and his definition of their limits no trained student can fail to see. Would any other scholar agree with him that any of the men he makes their representatives belonged wholly to any one of these types or was constant in the type to which he belonged? Moreover, every one of these men was subject, like the politicians whom he omits, to the pressure, the ever changing pressure, of circumstances and events; and not one of their utterances can be weighed save in the light of these changing conditions. And is it wise or possible to formulate a man's intellectual attitude before one has studied, and with all the resources of historical method, the story of his life and the development of his thought? To nobody does our author give such attention as to Luther; yet so unripe still is his work that he can misdate, and at the very climax of his chapter (p. 138), that reformer's most cardinal utterance on this subject, his letter to Link, ascribing it to 1544, just before Luther's death, not to 1528, when it was actually written—thus standing on its head the whole evolution of his attitude toward tolerance. True, he has borrowed this misdating from an earlier writer; but he could not have studied the work of later editors, he could not himself have traced Luther's ripening in this field, without discovering the error.

Nor would his readers less have profited by a more narrative treatment. Thus, in his dealing with his ethical-rational type, he discusses Acontius just before the Arminians, and his readers may suspect a relation between them. But, could he have told us the story, almost certainly in his own mind, of the young Wtenbogaert, while a student at Geneva, stumbling upon the book of Acontius on the shelves of his Calvinist teacher Simon Goulart and quickened to curiosity by having it taken from his hand, could we have heard from Wtenbogaert's own lips what he learned from it and how he treasured it, it would have meant more to our insight than pages of theology. How much else has our author held back lest he rob his later narrative?

When for a moment our author crosses the Atlantic his footing in fact is less sure. The "Cotton-Mather" quoted (p. 39) through Roger Williams was of course Cotton Mather's grandfather, John Cotton. Later (p. 161) he is correctly called Cotton, but with the odd predicate "Head-Congregationalist of New England" (*Hauptkongregationalist Neuenglands*).

But, whatever its slips, this is an able and a notable book. It is earnestly to be hoped that its author will push on undaunted with the history of tolerance presaged by it.

GEORGE L. BURR.

CORNELL UNIVERSITY.

Kant als Naturforscher. Von ERICH ADICKES. Berlin, W. de Gruyter & Co., Band I, 1924.—pp. xx, 378; Band II, 1925.—pp. viii, 494.

Dr. Adickes informs us that this work has been in preparation for twenty years, and most assuredly the exhaustiveness and thoroughness with which the task has been carried out lends ample support to the assertion. It may safely be regarded as a definitive exposition and conclusive appraisal of the value of Kant's labors in the domain of natural science.

The first volume treats (1) of Kant's *Ueber die wahre Schätzung der lebendigen Kräfte*, (2) of his Dynamical Theory of Matter (in the *Monadologica Physica* and the *Metaphysical Foundations of Natural Science*), and (3) of his Theory of Motion. Volume II is devoted to his other works on natural phenomena, and also contains two supplementary chapters on his philosophy of history and teleology. The exposition, instead of following the chronological order, thus proceeds systematically, according to subject-matter. Thus the third part of Volume I, entitled "The Theory of Motion," is sub-divided as follows: Chapter I, The Theory of Space. Chapter II, The Theory and Laws of Motion: (*a*) The Introduction to *The Metaphysical Foundations of Natural Science;* (*b*) *Phoronomie;* (*c*) Mechanics; (*d*) Phenomenology; (*e*) A comparison of the methods and viewpoints of the *Critique of Pure Reason* and of *The Metaphysical Foundations*, etc.

In his Introduction the author calls attention to the many conflicting estimates of the value of Kant's contributions to the study of natural phenomena. Some writers, emphasizing Kant's truly wonderful gifts of insight, his intuitive apprehension of fructifying conceptions, and his ability to synthesize vast numbers of apparently heterogeneous details, have placed him very high among the pioneers of science. Other critics have come to a very different conclusion, basing their estimate mainly on Kant's inability to apply his conceptions and principles methodically and in detail to the concrete material of scientific experience. Dr. Adickes holds that there is some truth and much error in these interpretations. It is true, for example, that Kant lacked ability to suggest, direct, or carry out actual experiments. He never employed his great knowledge of natural science as a basis for the discovery of new facts or the formulation of new laws. But this might suggest, not that hostile critics are right in belittling Kant's achievements as a scientist, but rather that the principle of evaluation may itself be open to criticism; and in fact the author's contention is that in order to establish a truly objective point of view, from which fairly to adjudge Kant's writings on natural phenomena, two very generally overlooked prerequisites are necessary.

First, the philosopher must be placed against the background of his age. This perfectly general criterion is, or should be, self-evident, and needs no special vindication in this case. Such a test makes possible, *e.g.*, a clear understanding of the excellences and weaknesses of Kant's treatment of methodological problems. Secondly, and of the greatest importance, is what appropriately may be called the psychological criterion. Namely, Kant's mind is very definitely not that of the scientist, *a fortiori* not that of the scientific

specialist. He had no genius for details in the sense demanded of the man of research. This deficiency, if it may be called such, is evident, indeed, even in his philosophical works. There, as elsewhere, Kant reveals himself rather as a characteristically "deduktiver und architektonisch-konstruktiver Geist" (I, p. 40). Herein, surely, lay his strength, for it is this mental character which enabled him to incorporate so effectively so many diverse elements in his philosophical system.

Now on the basis of these criteria it is obvious that Kant's main interest, with regard to science, would be in the so-called border-line problems and in methodological principles; and hence it is in this field, rather than in science proper, that his great contributions are to be sought and found. From this point of view it is not necessary to make unreasonable demands upon Kant's ability in purely scientific matters, in order to understand how his name deserves to be written in letters of gold in the annals of science. With whatever problems of science he concerned himself, therefore, it must be remembered that his consideration of them is always ultimately for the sake of their bearing upon methodological, epistemological and metaphysical issues. Hence his—even scientifically—important dynamical theory of matter, and his investigations concerning the nature of space and the foundations of geometry. Hence also, for him, cosmogony was not merely a scientific, but primarily a metaphysical problem. So again, with regard to the determination of the factors which accelerate, positively or negatively, the rotation of the earth; and the conviction of the continuity of all natural processes; and the suggested application of the laws of inertia and of the proposition of the parallelogram of forces in a realm where no one had previously thought of applying them. In all such cases Kant was inspired, such is Dr. Adickes' thesis, by epistemological or methodological considerations of a kind not then—perhaps not even yet!—familiar to the greater number of scientists, or become a part of their intellectual flesh and blood.

There seems to be no question, no issue, arising out of Kant's speculations on natural phenomena which Dr. Adickes has failed to consider in his monumental work. So, for example:—Were he living today would Kant have rejoiced in Einstein's Theory of Relativity? The author replies to this hypothetical question that it is impossible to answer it unqualifiedly one way or the other; that there are indications in Kant favorable to either interpretation. And with regard to what is perhaps a more important issue:—Dr. Adickes finds that on the whole the spirit of the *Metaphysical Foundations of Natural Science* is contrary to that of the *Critique of Pure Reason*. The concept of the 'Possibility of Experience,' for example, has a wholly different meaning in the two works. Thus if one were to hold strictly to the teachings of the latter work there would be no possible way of proceeding from it, by an application of the transcendental method, to the content of the former work. And *vice versa* the method and conceptions set forth in the *Foundations* can make no claim to *apriorität* (universality and necessity) in the sense demanded by the *Critique of Pure Reason*.

H. R. SMART.

CORNELL UNIVERSITY.

Einfuehrung in das philosophische Denken. Von WILHELM BRUHN. Leipzig und Berlin. B. G. Teubner, 1923.—pp. iv, 155.

Dr. Bruhn's introduction to philosophic thinking is logical in its construction, precise in its exposition, rigorous in its argumentation, condensed and technical in style. It ingeniously unites the historical and systematic modes of approach to philosophy. It emphasizes throughout the epistemological viewpoint.

At the outset the essence of philosophic thought is illustrated by the work of the beginners of ancient and modern thought, Thales and Descartes. The interpretation of Thales yields the conception of philosophy as "the wondering and investigating search of the unitary human spirit for a conceptual unity of the world" (p. 8). Here already the reviewer feels that the besetting sin of the author's method appears. Thales' search for a unitary substance in the objective world is explained by attributing it to a prior sense of personal unity which seeks to maintain itself against the hostile and chaotic flux of things. Schiller's lyric, *Die Kuenstler*, is quoted, but nothing is quoted from the ancient accounts of Thales to support such a view; it is merely that the modern Teuton, brought up on Kant and Schiller, feels it must have been so. The author proceeds to the interpretation of Descartes, which yields a more clarified form of the same concept: "Philosophic thought, by the critical sifting of things, proceeds from the secure standpoint of self-certainty to build up the world in thought" (p. 21).

The author describes the course of Pre-Socratic philosophy under the heading of "naïve thought," with subheadings "naïve reliance on the senses," "naïve reliance on thought," and "naïve reliance on intuition" (Heraclitus). The shortcomings of each are brought to light. Subsequent sections portray the shift of attention from object to subject in the Sophists and Socrates, the "youthful" rationalism of Plato, and the "decadent" rationalism of the Neo-Platonists. (Religious faith and philosophic reason are to be kept *absolutely distinct* and the Neo-Platonists are severely censured for their attempt to synthesize them.)

In the modern period the "classical rationalism" is illustrated chiefly by Descartes, and empiricism chiefly by Hume. These tendencies are superseded by the synthesis embodied in Kant's *Critique of Pure Reason*. Here the author reaches his climax. (He discusses no author later than Kant, except for a brief reference to Schleiermacher). Still Kant's epistemology is not treated as ultimately valid. The following passage states the author's conclusion on this pivotal point and at the same time illustrates how little concession to the weakness of the flesh is made by his style. "The truth lies half way between Hume and Kant. As we summarized the Kantian view by the proposition: 'In so far as cognition applies the *a priori* to sense experience, we get scientifically valid knowledge of the object as it appears to us,' so we must now add the following restrictions, bringing us closer to Hume: 'In so far as the phenomenon is not the exclusive product of the subject, but is partially determined by the unexperienced thing-in-itself, and further, in so far as the subject's system of mental laws cannot be withdrawn from the

stream of time as an absolute quantum, to this extent our knowledge of the phenomenal world, being determined by these, cannot claim a validity that is absolute, *i.e.*, unchangeable, but can only claim a validity that is factually necessary and universally obligatory, but still merely temporary'" (p. 152).

Kant's categories are thus too subjective for the use he makes of them in justifying the sciences. Still worse, his justification of religion and ethics involves an extension of their use that is, according to his own principles, illicit. The solution lies in recognizing that ethico-religious intuition needs no support from reason, while on the other hand science and philosophy require the discovery (still to seek) of an *a priori* that is simultaneously subjective and objective.

With this slender hold on rationality the student is left dangling above the welter of unscientific dogmatisms, scepticisms, intuitionisms, theosophies, etc., into which he has been sternly warned not to fall.

According to its title page this book is intended for beginners and for persons studying alone. If any such persons desire a book that blends the history of thought with Kantian epistemology in a severely abstruse form, this is the book for them.

Albert R. Chandler.

Ohio State University.

The Æsthetics of Robert Browning. By C. N. Wenger. Ann Arbor, Michigan, George Wahr, 1924.—pp. 272.

This is an attempt to render systematic and available for the science of æsthetics the relevant but fragmentary utterances of a poet about the nature of beauty. The writer is aware of the risk in applying logic to what has been dramatically or otherwise imaginatively conceived, but he believes that the "added store, a richness born with the artistry" in an æsthetic theory expressed by an actual laborer in the field, justifies the risk. Perhaps the chief value of the book is in the large number of direct quotations from the poetry and prose of Browning which are thus conveniently assembled for a student of æsthetics. Dr. Wenger makes liberal use of sources that are comparatively infrequently noted: the *Essay on Shelley*, for example, and *Fifine at the Fair*.

Dr. Wenger's three-fold scheme in discussing Browning's theory of art and beauty is as follows: (1) the production of art, character of the artist, the creative impulse; (2) the nature of art works, materials and their uses; (3) the appreciation of art, contemplation and enjoyment. We are told that "practically all of the poet's theories concerning the nature, gifts, and methods of artists are gathered up and summarized in" the twenty three lines from *The Ring and the Book* beginning: "Man,—as befits the made, the inferior thing" (pp. 138, 139).

Artists, for Browning, are seers rather than fashioners; their function is to mediate to ordinary mortals the divine essence immanent in man and nature. Works of art, again, are not products which can be abstracted from the souls of their creators, but are" effluences." The subjective emphasis carries over into

what are for him the materials of art,—knowledge or truth, power, and love, and these materials are 'used' in the artistic experiences of probation, aspiration, and progress. The principle of progress, which implies that the artist's "sublime fragmentary essay toward a presentment of the correspondency of the universe to Deity" may require an indefinite number of cycles for completion, is, according to Dr. Wenger, the central principle both of Browning's general philosophy and, more particularly, of his æsthetics. In the matter of the appreciation of art, Browning and Croce stand together in treating it as no specific kind of experience, but a degree of artistic creation.

The book strikes one on the whole as a rough preliminary sketch of what might be, because of the interest and value of the theme, an important contribution to æsthetics. There is repetition, vagueness, and infelicity in the development of the ideas, and there is a shocking number of mechanical errors. A substantial error seems to be Dr. Wenger's understanding of the so-called 'death of art' in Hegel. He agrees with Croce in taking Hegel to say that art will die out and be superseded by philosophy. Since the interpretation of human and artistic progress is fundamental in Dr. Wenger's study, it would seem that he should take account of Bosanquet's convincing paper entitled "Appendix on Croce's Conception of the 'Death of Art' in Hegel."

KATHERINE GILBERT.

UNIVERSITY OF NORTH CAROLINA.

Instinct: A Study in Social Psychology. By L. L. BERNARD. New York, Henry Holt and Company, 1924.—pp. ix, 550.

This book is concerned with the "relative importance of instinct and habit—in the development of social institutions and social control" (p. 3). Contrasting the positions of 'instinctivists' and 'environmentalists' the author early takes his stand with the latter. He defends throughout the view that environment is the major instrument of control. He sharply distinguishes between native and acquired traits, rejecting after elaborate examination all definitions of instinct which include any ingredient of traceable modification in the response—not only post-natal but post-conceptual also. All 'central instincts,' 'general tendencies,' ideas, customs, instinctive 'cores' are found to be inappropriately called inherited instincts. Instincts for him must be inherited 'structures' and in this context 'structure' means neural structure. All patterns of behavior reveal traceable modification during the life of the organism after conception. We inherit "concrete organs or tissues" (p. 509) not abstractions and purposes. At times it seems that he means this in a literal sense; at other times he modifies the claim by citing, for instance, (p. 292), "the discharge of semen, the giving of milk to the sucking child, the menstrual processes, and the vaginal contractions in orgasm are always typically the same processes, regardless of what the environmental situation is." This is the most prominent illustration of the author's attempt to translate neural structure into functional behavior on the plane of instinct and it must seem to the reader a very unconvincing illustration indeed. The

work of Koehler and Koffka, for instance, is sufficient refutation of the phrase 'regardless of what the environmental situation is.' The latter has shown (*The Growth of the Mind*, Ch. iii) the logical weakness of the abstract concept of either 'stimulus' or 'response.' Each varies in terms of the other and to speak of fixed response is to hypostatize an abstraction. Our author's use of the word 'typically' above is evidence from his own pen of the truth of Koffka's contention. Logically there is no stopping place in the search for the irreducible components of an action pattern any more than there is in the search for such units in the perception pattern. The author is on solid ground when he distinguishes between structure and function as a basis of discrimination between that which is inherited and that which is acquired. The argument used throughout that response with a trace of ontogenic component must be witheld from the realm of instinct together with the argument cited from Koffka compel us to reject the whole supposition of inherited function. On page 302 the author himself declares that "all activity and thought processes come into organization gradually."

Nevertheless there are certain difficulties involved in speaking of bodily structures as instincts. If instinct is the same as structure then we must have a new word to mean what instinct meant before. Tendencies revealed in an analysis of experience, whether inherited biologically or socially, are realities to be reckoned with. The author speaks of them as 'social valuations' but social valuations express human nature in some sense. The reader is at a loss to know why he is called upon to reject Hocking's 'central will' as an appropriate name for the human tendency which in the long run has developed 'social valuations.'

In another phase of the discussion (pp. 40 *f.*) the author is much less iconoclastic. He accepts the orthodox view that an instinct is a chain of reflexes and that there are three great interests—food, fighting, sex—without bothering himself to show that these three are not logical coördinates at all. He recognizes 'conflict' (following Jennings) as inherent in the protoplasm, without connecting it in any way with Hocking's argument that the conflict has developed the central concept of organization. The body of the book is a detailed examination of published material on the instincts. Each author cited, however, is predisposed in ways that prevent objective comparison of his view with that of another. For that reason this portion of the book is less valuable than the part given to constructive analysis of the structure of experience itself. If we examine the social manifold we find in it the preponderant rôle played by environment. The definable units of heritable structure are negligible as compared with the definable complexity of social forces. The spread of a Mendelian character is confined to the succession of generations while the spread of a habit trait may also go on laterally within the generation. The author brings ample evidence of the careless thinking of those who talk of the 'unit' inheritance of obviously complex habit and social structures such as 'criminality' and occupational employment.

The chapters are quite unequal in value. In Chapter VII various uses of

the word 'instinct' are cited. This is a card-catalogue type of writing which is often employed by sociologists. Statistical classification of fifty-seven varieties of use is so much waste paper. Why explain a useful concept by quoting Wordsworth's "genius *instinct* with music" or tabulating 15,789 uses of the word instinct in literature? Aside from such padding the book is readable and unified. It will be of use to students and teachers who look for a ready reference to the current discussion of instinct. The critical reader will find it marred by two faults of theory. First, the logical implication of the assertion that "only structures are inherited" is not carried out. This should have led him to reject the whole notion of inherited instinct or inherited function. Secondly, he should have indicated more clearly the logical difference between a social inference drawn from a study of neural structure and a social conclusion drawn from a patient analysis of social or cultural structure. On page 246, speaking of the fallacy of biological analogy, he does indeed demand a first hand analysis of "observed social processes" and later charges the biologist with the theory that "environment is a relatively simple and rigid thing." Nevertheless, he does not hesitate to speak of an inherited response (p. 249) as a unit character in the Mendelian sense. Mendel's dogma of unit characters may perhaps apply to bodily structures but as applied to the structure of experience it has no significance precisely because, as the author is elsewhere at great pains to show, experience is a living function established after conception between the organism and its environment. "All activity and thought processes come into organization gradually" (p. 302). The author becomes a splitter in multiplying the instinctive 'units' although, as he half recognizes, (p. 415) this method logically leads to a *reductio ad absurdum* in the theory of the atomic structure of experience.

H. G. Townsend.

Smith College.

The following books also have been received:

Philosophical Writings of Henry More. Edited with Introduction and Notes, by Flora Isabel MacKinnon. New York, Oxford University Press, 1925.—pp. xxviii, 334.

Proceedings of the Aristotelian Society. New Series Volume XXV. London, Williams & Norgate, 1925.—pp. 350.

Philosophy and Metaphysics. Aristotelian Society Supplementary Volume V. London, Williams and Norgate, 1925.—pp. 212.

Essentials of Scientific Method. By A. Wolf. New York, The Macmillan Company, 1925.—pp. 160.

The Ways of Knowing, or The Methods of Philosophy. By Wm. Pepperell Montague. New York, The Macmillan Company, 1925.—pp. 428.

The Mind and Its Place in Nature. By C. D. Broad. (International Library of Psychology, Philosophy and Scientific Method.) New York, Harcourt, Brace & Co., 1925.—pp. xii, 674.

Five Lectures on the Problem of Mind. (University of Texas Studies.) By GUSTAVUS WATTS CUNNINGHAM. Austin, University of Texas Press, 1925.—pp. 120.

Ether and Reality. A Series of Discourses on the many Functions of the Ether of Space. By SIR OLIVER LODGE. New York, George H. Doran Company, 1925.—pp. ix, 179.

Psyche. The Cult of Souls and Belief in Immortality among the Greeks. By ERWIN RHODE. Translated from the eighth edition by W. B. HILLIS. (International Library of Psychology, Philosophy and Scientific Method.) New York, Harcourt, Brace & Co., 1925.—pp. xviii, 628.

The Life of Mind. By E. JORDAN. Indianapolis, Charles W. Laut and Company, 1925.—pp. vi, 324.

God and Intelligence in Modern Philosophy. A Critical Study in the Light of The Philosophy of Saint Thomas. By FULTON J. SHEEN. With an Introduction by G. K. CHESTERTON. New York, Longmans, Green and Co., 1925.—pp. xvi, 296.

History of Philosophy. By ALFRED WEBER. Translated by FRANK THILLY. With Philosophy Since 1860, by RALPH BARTON PERRY. New York, Charles Scribner's Sons, 1925.—pp. xiv, 606.

Art and the Material. The Adamson Lecture for 1925. By S. ALEXANDER. New York, Longmans, Green and Co., 1925.—pp. 32.

Modern Classical Philosophers. Selections Illustrating Modern Philosophy from Bruno to Bergson. Revised and Enlarged Edition. Compiled by BENJAMIN RAND. Boston, Houghton Mifflin Company, 1924.—pp. xiv, 893.

Hellenic Civilization. An Historical Survey. By MAURICE CROISET. Translated by PAUL B. THOMAS. With an Introduction by EDWARD DELAVAN PERRY. New York, Alfred A. Knopf, 1925.—pp. x, 318.

The Logical Influence of Hegel on Marx. (University of Washington Publications in the Social Sciences.) By REBECCA COOPER. Seattle, University Press, 1925.—pp. 85–182.

The Platonism of Joachim Du Bellay. By ROBERT VALENTINE MERRILL. Chicago, The University of Chicago Press, 1925.—pp. 150.

Die Einheit des Geisteslebens in Bewusstsein und That der Menscheit. Untersuchungen von RUDOLF EUCKEN. Zweite Auflage. Berlin, Walter de Gruyter & Co., 1925.—pp. xii, 500.

Kant als Naturforscher. Band II. Von ERICH ADICKES. Berlin, W. de Gruyter & Co., 1925.—pp. viii, 494.

Die Logik der soziologischen Begriffsbildung. Mit besonderer Berücksichtigung von MAX WEBER. Von HANS OPPENHEIMER. Tübingen, Verlag von J. C. B. Mohr (Paul Siebeck), 1925.—pp. vi, 112.

Die objektive Geltungslogik und der Immanenzgedanke. Eine erkenntnistheoretische Studie zum Problem des Sinnes. Von RUDOLF ZOCHER. Tübingen, Verlag von J. C. B. Mohr (Paul Siebeck), 1925.—pp. iv, 50.

L'Éducation Morale. Par EMILE DURHKEIM. Avertissement de Paul Fauconnet. Paris, Félix Alcan, 1925.—pp. iv, 326.

NOTES.

Sixth International Congress of Philosophy.

(First Circular.)

In accordance with the Preliminary Announcement of August, 1924, the Sixth International Congress of Philosophy will meet September, 1926, in the United States, under the auspices of the American Philosophical Association.

The date of the Congress will be September 13–17, 1926. The place will be Harvard University, Cambridge, Massachusetts. The President of Harvard and the Department of Philosophy extend to the Congress a hearty welcome. In particular, they are making convenient arrangements for the entertainment of Delegates and Members. Rooms will be provided for official Delegates free of charge. Meals for Delegates, rooms and meals for Members, will be furnished at minimum rates.

The recognized languages will be English, French, German, Italian, and Spanish.

The sessions of the Congress will be arranged under four divisions: A. Metaphysics (including the philosophy of nature, philosophy of mind, and philosophy of religion); B. Theory of Knowledge, Logic, and Scientific Method; C. Theory of Values (including ethics, social philosophy, philosophy of the state, philosophy of law, philosophy of education, and æsthetics); D. History of Philosophy. Under each of these divisions one General Session will be held with papers by specially invited speakers, whose names and subjects will be announced later. Sectional Meetings in part on subjects determined in advance, will also be held under each division. The time allotted for sectional papers will be limited to twenty minutes each. Members offering papers are requested to forward, with the titles of their papers, brief typewritten summaries for submission to the Committee on the Programme. They are further requested to note that, to the regret of the Committee, it will be impossible to accept papers unless they are to be presented by their authors in person.

Membership in the Congress will include Active Members and Associate Members. Active Members will be entitled to all the privileges of the Congress, including a copy of the Proceedings. The fee for Active Members will be five dollars. The fee for Associate Members (families of Active Members and other qualified persons) will be two dollars and a half; but they will not be entitled to vote, to special privileges of entertainment, nor to the Proceedings.

Adhesions, Membership fees, and Papers for the Sectional Sessions may be

sent to Professor John J. Coss, Corresponding Secretary, 531 West 116 Street, New York City.

Later circulars will contain the detailed plans for the Congress as they are developed and matured. Meanwhile, we commend it to the interest of our Colleagues in all lands; as, in behalf of the American Philosophical Association, we have the honor to invite them to join in continuing the series of International Congresses, inaugurated at Paris in 1900 for the advancement of philosophy and the promotion of intercourse among philosophical scholars.

(Signed)

For the Organizing Committee

NICHOLAS MURRAY BUTLER, *Chairman*,
A. C. ARMSTRONG, *Honorary Secretary*.

We give below a list of articles in current philosophical periodicals:

THE AUSTRALASIAN JOURNAL OF PSYCHOLOGY AND PHILOSOPHY, III, 3: *W. R. Boyce Gibson*, Does the Ideal Really Exist?; *H. C. Becroft*, Professor Kemp Smith's Theory of the Sensa; *Eric Farmer*, Motion Study and Psychology; *A. H. Martin*, The Psychological Examination of Immigrants; *L. H. Allen*, Psychological Studies (2) Aversion in Timon of Athens; *Winifred Taylor*, Researches and Reports. The Application of Intelligence Tests to Personnel in a Retail Store.

THE JOURNAL OF PHILOSOPHY, XXII, 19: *Louis Arnaud Reid*, Moral Intuitionism, Feeling, and Reason; *Edgar Wind*, Contemporary German Philosophy, II. 20: *Anathon Aall*, The Problem of Reality; *H. G. Townsend*, The Obscurantism of Science. 21: *L. E. Akeley*, The Problem of the Specious Present and Physical Time. 22: *E. A. Singer, Jr.*, George Stuart Fullerton; *John Dewey*, The Naturalistic Theory of Perception by the Senses.

THE JOURNAL OF RELIGION, V, 5: *A. Eustance Haydon*, Modernism in China; *Paul De Witt Twinem*, Modern Syncretic Religious Societies in China I; *Miles Mark Fisher*, The Negro Church and the World-War; *Eugene W. Lyman*, Ritschl's Theory of Value-Judgments; *Henry Nelson Wieman*, Religion in Dewey's "experience and Nature."

MIND, XXXIV, 136: *F. P. Ramsey*, Universals; *R. M. Blake*, On Mr. Broad's Theory of Time; *T. Whittaker*, Nicholas of Cusa; *T. K. Slade*, An Inquiry into the Nature of Colour Associations.

THE MONIST, XXXV, 4: *Martin Schulze*, Herder's Psychology; *J. E. Turner*, Nature and Ultra-Nature; *J. R. Haldane*, Gravitation: A Simplified Theory of Relativity; *J. Albert Haldi*, Mechanism and Vitalism; *Oliver L. Reiser*, An Electromagnetic Theory of Matter, Life and Mind; *Winthrop Parkhurst* and *W. J. Kingsland, Jr.*, Infinity and the Infinitesimal.

THE AMERICAN JOURNAL OF PSYCHOLOGY, XXXVI, 4: *H. K. Mull*, The Acquisition of Absolute Pitch; *H. Helson*, The Psychology of *Gestalt*; *T. D. Cutsforth*, The Rôle of Emotion in a Synæsthetic Subject; *H. S. Liddell*, The

Behavior of Sheep and Goats in Learning a Simple Maze; *H. E. Burtt* and *W. W. Tuttle*, The Patellar Tendon Reflex and Affective Tone; *E. S. Rudisill*, Constancy of Attitude in Weight Perception; *F. R. Bichowski*, The Mechanism of Consciousness: Pre-Sensation; *G. J. Rich*, A Scale for Scoring Tests with Alternative Answers; *H. M. Johnson*, The Definition and Measurement of Attention; *G. J. Rich*, The Measure of Approximation of Data to the Phi-Gamma Hypothesis.

PSYCHOLOGICAL BULLETIN, XXII, 9: Abstracts of Periodical Literature. 10: General Reviews and Summaries.

JOURNAL OF EXPERIMENTAL PSYCHOLOGY, VIII, 5: *Carl N. Rexroad*, A Continuous multiple Choice Apparatus; *Kate Gordon*, Class Results with Spaced and Unspaced Memorizing; *W. R. Miles* and *Eugene Shen*, Photographic Recording of Eye Movements in the Reading of Chinese in Vertical and Horizontal Axes: Method and Preliminary Results; *Franklin O. Smith*, An Experimental Study on Retinal Sensitivity and Discrimination for Purple under Different Degrees of Intensity of Stimulation.

REVUE PHILOSOPHIQUE, L, 9–10: *A. Espinas*, Économie politique, économie sociale, et sociologie; *R. Lenoir*, Henri de Saint-Simon; *B. Petronievics*, Sur la valeur de la vie; *P. Busco*, Kant et Laplace.

ZEITSCHRIFT FÜR PSYCHOLOGIE, XCVII, 5–6: *G. E. Müller*, Ueber den Einfluss des Weissgehaltes des Infeldes und des Umfeldes auf die dem Infelde entsprechenden Erregungen; Biographie der deutschen Literatur des Jahres 1924 über Psychologie, ihre Hilfswissenschaften und Grenzgebiete, zusammengestellt von *Friedrich Sander;* Alphabetisches Verzeichnis der Autornamen der Bibliographie. XCVIII, 1–2: *G. E. Müller*, Ueber den Einfluss des Weissgehaltes des Infeldes und des Umfeldes auf die dem Infelde entsprechenden Erregungen (Schluss); *G. Révész*, Abstraction und Wiedererkennung; *H. Henning*, Das willkürliche Anhalten des Herzschlags; *H. Henning*, Wünschelrutengänger ohne Wünschelrute; *P. Plassmann*, Einige Sinnestäuschungen und ihre Ursachen; *H. Werner*, Ueber Mikromelodic und Mikroharmonik.